

XXXV.  
1923.

WEST RIDING OF YORKSHIRE COUNTY  
COUNCIL.

---

THIRTY-FIFTH

# ANNUAL REPORT

OF THE

County Medical Officer,

1923.

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*Printed by Order of the Public Health and Housing Committee,  
15th December, 1924.*

## FOREWORD.

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This compilation—the 35th of a series—is a pinnacle view only of the Public Health Services in the West Riding Administrative County during 1923.

One obvious feature is the expansiveness of the work compared with even ten years ago, and further extensions for the future development of several branches are in preparation to meet the rightful demands of health requirements.

The encouragement for all this expenditure—if it is permitted to condescend to monetary value of life and health—found in the movements of vital statistics and especially in the mortality rates, which have now reached an index of improvement unparalleled in health administration.

I take this opportunity of again expressing my sincere thanks to the local health officials for their generosity in co-operation, and also to the medical profession, who exhibited such encouraging enthusiasm during “Health Week.”

**JAMES ROBT. KAYE,**

*County Medical Officer.*

County Hall,

Wakefield,

8th December, 1924.

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## SUMMARY OF VITAL STATISTICS.

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AREA of Administrative County ... 1,641,462 acres.

POPULATION for purposes of Birth Rate ... 1,506,600

POPULATION for purposes of Death Rate ... 1,506,600

SANITARY DISTRICTS, 150, namely:—11 Boroughs.

(See Table 1., Appendix).

111 Urban Districts.

28 Rural Districts.

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The Vital Statistics for the years 1922 and 1923 and for the past ten years, may be summarised as follows:—

	Average for 10 years.		
	1913-22.	1922.	1923.
BIRTH RATE (Administrative County) ...	22·0	20·9	20·6
(Per 1,000 estimated population.)			

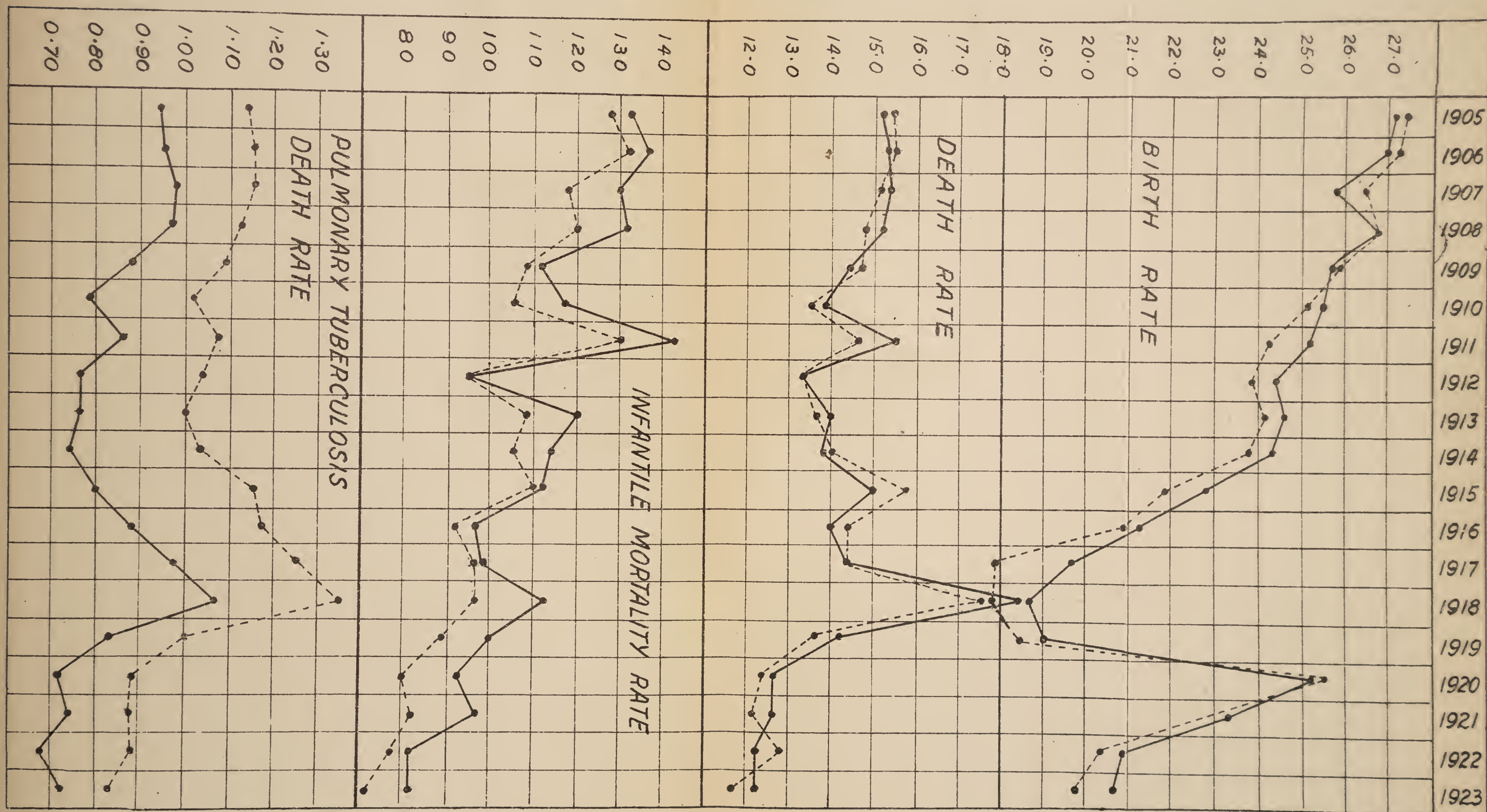
### DEATH RATES:—

All Causes ...	14·1	12·2	12·2
Zymotic ...	1·05	0·58	0·53
Phthisis (Tuberculosis of Respiratory System) ...	0·81	0·68	0·71
Other Forms of Tuberculosis ...	0·36	0·30	0·28
Respiratory ...	2·54	2·07	2·11
(Per 1,000 estimated civil population.)			

INFANTILE MORTALITY ...	102	81	81
i.e., Number of deaths under one year per 1,000 births.			



CHART SHEWING VITAL STATISTICS FOR YEARS 1905-23 FOR THE  
WEST RIDING ADMINISTRATIVE COUNTY COMPARED  
WITH THOSE FOR ENGLAND & WALES.



Dotted Line = ENGLAND & WALES. Ordinary Line = WEST RIDING ADMINISTRATIVE COUNTY.



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## PART I.

**Area and Population.**—A change in boundary came into operation during 1923, and this is set out in the table given below:—

### CHANGES IN THE BOUNDARIES OF SANITARY DISTRICTS DURING 1923.

Date of Change.	Area decreased or abolished by change.	Area increased, or constituted, by change.	Area in Acres.	Population 1921.
1-10-23	Skipton R.D.— <i>Whole Parish of Coates</i>	Barnoldswick U.D.	634	392

The area and estimated population at the middle of 1923 of the West Riding Administrative County as a whole and each constituent Sanitary District are given in Table I of the Appendix to this Report.

**Births.**—The births registered in the Administrative County during the year 1923 numbered 30,987, giving a rate of 20·6 per 1,000 of the estimated population, against 20·9 for the year 1922, and an average of 22·0 for the preceding ten years, 1913-1922. The sex distribution was as follows: Males 15,786, females 15,201; illegitimate births numbered 1,332. Statistical comparisons are shown in a series of tables later in the report, and an interesting study may be made of Tables I and II at the end, which contain detailed figures relating to each Sanitary District in the Riding. The birth-rate for England and Wales for 1923 was 19·7 per 1,000, and was the lowest recorded with the exception of the war years 1917-1919.

The following table is interesting as showing the divergencies from the average of 20·6 for the County, excluding those districts with less than 1,000 population.

#### *Districts with Highest Birth Rates.*

Thurnscoe U.D. ...	35·4	Hemsworth U.D. ...	33·5
Thorne R.D. . ...	34·7	Adwick-le-Street U.D.	32·8
Conisborough U.D. ...	33·7	Doncaster R.D. ...	32·1

*Districts with the Lowest Birth Rates.*

Calverley U.D.	...	9·2	Soyland U.D.	...	10·4
Midgley U.D.	...	9·7	Greetland U.D.	...	11·0
Shepley U.D.	...	10·3	Shelf U.D.	...	11·0
Honley U.D.	...	10·4			

**Deaths.**—The number of deaths registered as belonging to the County during 1923 was 18,311, the sex distribution being: Males 9,367, females 8,944. This figure was equal to an annual death-rate for the County of 12·2, compared with an identical rate for the previous year, and 14·1 for the ten years, 1913-1922. For England and Wales during 1923 the death-rate was 11·6 per 1,000 of the population, which, the Registrar General points out, was “lower than any other year, the lowest rate hitherto recorded being 12·1 in 1921.”

A chart has been prepared (to be found at the front of this Report) which illustrates graphically since the year 1905 the fluctuations in the general death-rate, infant mortality rate, pulmonary tuberculosis death-rate, and the birth-rate, in the Administrative County area alongside those for England and Wales.

Tables I and II of the Appendix to this Report contain the principal mortality figures for each of the County Districts. A survey of these figures shows that the six Districts with the highest death-rates were: Knaresborough U.D., 17·8; Mytholmroyd U.D., 17·7; Thurlstone U.D., 16·6; Silsden U.D., 16·5; Denholme U.D., 16·2, and Todmorden R.D., 16·0; and those with the lowest were: Hoylandswaine U.D., 7·2; Emley U.D., 7·4; Barkisland U.D., 8·1; Bowland R.D., 8·8; Kiveton Park R.D., 8·9, and Altofts U.D., 9·0. For the purpose of these comparisons only Districts having a population of not less than 1,000 have been included.

**Transferable Deaths.**—Under the Registrar General’s system of quarterly distribution of “transferable deaths” (i.e., the allocation of deaths from the districts in which they occur to the place of usual residence) slips relating to 2,714 deaths were sent out to the local Medical Officers of Health during 1923.



**Mortality at Different Ages.**—The following table gives the mortality from various causes in different age-groups in the West Riding County Area during 1923, the figures having been compiled from a return furnished by the Registrar General.

CAUSES OF DEATH.	Age at Death.									All Ages
	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and under 75.	75 and upwards.	
Enteric Fever ... ..	—	—	—	5	8	18	4	—	—	35
Smallpox ... ..	—	—	—	—	—	—	—	—	—	—
Measles ... ..	56	82	67	18	—	1	—	—	—	224
Scarlet Fever ... ..	2	3	17	24	4	2	—	—	—	52
Whooping Cough ... ..	67	37	53	4	—	—	—	—	—	161
Diphtheria ... ..	2	13	24	25	1	—	2	—	—	67
Influenza ... ..	17	5	10	16	29	103	138	107	60	485
Encephalitis Lethargica ... ..	—	—	3	3	5	2	4	—	—	17
Meningococcal Meningitis ... ..	1	—	2	4	1	1	—	—	—	9
Tuberculosis of Respiratory System ... ..	11	8	20	53	236	425	276	35	6	1070
Other Tuberculous Diseases ... ..	48	69	72	69	70	51	35	8	3	425
Cancer, Malignant Disease ... ..	2	—	5	3	14	140	828	544	207	1743
Rheumatic Fever ... ..	—	—	3	18	25	14	9	1	1	71
Diabetes ... ..	—	—	1	6	10	26	85	56	23	207
Cerebral Hæmorrhage, etc. ... ..	2	—	—	1	4	29	364	492	386	1278
Heart Disease ... ..	2	2	1	41	54	208	751	719	484	2262
Arterio-Sclerosis ... ..	—	—	—	—	—	4	110	223	246	583
Bronchitis ... ..	208	41	18	4	3	45	254	417	434	1424
Pneumonia (all forms) ... ..	341	208	123	74	67	180	264	157	94	1508
Other Respiratory Diseases ... ..	15	8	12	17	8	26	71	44	50	251
Ulcer of Stomach or Duodenum ... ..	—	1	—	—	3	39	56	18	2	119
Diarrhœa, etc. ... ..	220	43	22	10	4	10	19	25	16	369
Appendicitis and Typhlitis ... ..	—	1	5	21	28	23	18	14	5	115
Cirrhosis of Liver ... ..	—	—	—	1	1	8	51	17	4	82
Acute and Chronic Nephritis ... ..	2	4	11	15	28	65	240	141	68	574
Puerperal Sepsis ... ..	—	—	—	—	14	40	—	—	—	54
Other Accidents and Diseases of Pregnancy and Parturition ... ..	—	—	—	—	12	67	1	—	—	80
Congenital Debility and Malformation, Premature Birth ... ..	1039	6	7	2	2	2	1	—	—	1059
Suicide ... ..	—	—	—	—	14	46	66	18	5	149
Other Deaths from Violence ... ..	22	21	38	75	88	134	165	49	45	637
Other Defined Diseases ... ..	461	76	60	99	101	255	643	552	913	3160
Causes Ill-defined or Unknown ... ..	1	7	—	—	2	6	17	7	1	41
<b>ALL CAUSES ... ..</b>	<b>2519</b>	<b>635</b>	<b>574</b>	<b>608</b>	<b>836</b>	<b>1970</b>	<b>4472</b>	<b>3644</b>	<b>3053</b>	<b>18311</b>

### Age-distribution of the Nett Deaths.

	Under 1 year.	1 and under 2.	2 and under 5.	5 and under 15.	15 and under 25.	25 and under 45.	45 and under 65.	65 and under 75.	75 and upwards.	Total (Nett Deaths).
Urban Districts (122)	1824	478	437	466	623	1513	3574	2812	2241	13968
Rural Districts (28)	695	157	137	142	213	457	898	832	812	4343
West Riding Administrative County ...	2519	635	574	608	836	1970	4472	3644	3053	18311

### West Riding Birth and Death Rates for Ten Years.

The following table shows the County birth and death-rates for the past 10 years:—

	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923
Birth-rate .. ..	24·3	22·8	21·2	19·6	18·6	19·0	25·2	23·3	20·9	20·6
Death-rate .. ..	13·9	15·0	14·0	14·4	18·5	14·2	12·6	12·6	12·2	12·2
Infant Mortality†	114	112	96	99	112	100	92	97	81	81
Zymotic Death-rate*	1·51	1·63	0·92	0·95	1·61	0·57	0·95	0·78	0·58	0·52
Small-Pox .. ..	nil	nil	nil	nil	nil	nil	nil	nil	0·00	nil
Scarlet Fever ..	0·06	0·06	0·04	0·00	0·02	0·02	0·02	0·02	0·03	0·03
Diphtheria & Croup	0·19	0·18	0·16	0·14	0·14	0·13	0·13	0·09	0·07	0·04
Enteric Fever ..	0·09	0·07	0·05	0·06	0·06	0·03	0·03	0·06	0·03	0·02
Measles .. ..	0·32	0·53	0·13	0·31	0·71	0·12	0·34	0·02	0·16	0·15
Whooping Cough „	0·25	0·22	0·11	0·13	0·38	0·07	0·07	0·21	0·13	0·11
Diarrhoea, &c.† „	21·68	18·64	14·07	10·42	12·58	10·45	13·60	16·43	7·77	8·48
Respiratory ..	2·32	2·88	2·25	2·77	3·39	2·84	2·27	2·20	2·07	2·11
Phthisis .. ..	0·74	0·80	0·89	0·98	1·06	0·82	0·71	0·74	0·68	0·71

† Deaths under one year per 1,000 births.

\* From 1915 includes deaths from Diarrhoea and Enteritis under 2 years of age only.

‡ Deaths under two years of age per 1,000 births.

## Average Birth and Death Rates from 1903—1922.

The following table gives the average rates for quinquennial periods, compared with the rates for 1923, for the Urban and Rural Districts of the Administrative County:—

RATE.	URBAN DISTRICTS.					RURAL DISTRICTS.				
	Quinquennial Periods.				Year 1923 for com- par- ison.	Quinquennial Periods.				Year 1923 for com- par- ison.
	1903-07	1908-12	1913-17	1918-22		1903-07	1908-12	1913-17	1918-22	
Birth Rate . . . . .	26·7	24·8	21·5	20·6	19·7	28·8	27·6	26·4	23·8	23·1
† Infant Mortality . . . . .	141	123	110	96	82	129	111	106	95	78
Death Rates:—										
All Causes . . . . .	15·3	14·4	14·3	14·1	12·4	14·8	13·4	14·0	13·4	11·3
* Zymotic Diseases . . .	1·93	1·53	1·18	0·85	0·54	1·76	1·50	1·32	0·96	0·51
Pulmonary Tubercu- losis . . . . .	1·04	0·91	0·86	0·84	0·75	0·80	0·67	0·74	0·67	0·59
Non-Pulmonary Tuberculosis . . . . .	0·56	0·47	0·41	0·34	0·29	0·43	0·39	0·36	0·29	0·27
Respiratory . . . . .	2·77	2·46	2·58	2·58	2·21	2·55	2·27	2·52	2·35	1·84
Smallpox . . . . .	0·04	nil.	0·00	0·00	nil.	0·01	nil.	0·00	nil.	nil.
Scarlet Fever . . . . .	0·14	0·07	0·05	0·02	0·04	0·15	0·05	0·05	0·03	0·03
Diphtheria and Croup . .	0·20	0·14	0·18	0·11	0·05	0·20	0·14	0·12	0·11	0·03
Enteric Fever . . . . .	0·13	0·10	0·06	0·04	0·02	0·10	0·10	0·07	0·03	0·02
Measles . . . . .	0·34	0·31	0·31	0·26	0·16	0·29	0·32	0·34	0·26	0·11
Whooping Cough . . . .	0·27	0·24	0·17	0·16	0·10	0·24	0·21	0·17	0·19	0·11

† Deaths under one year per 1,000 births.

\* Up to and including the quinquennium 1908-12 includes deaths from Diarrhoea and Enteritis at all ages, but from 1913 those occurring under two years of age only.



**Urban and Rural Statistics for 1923.**—These are set out below for the aggregate districts, and a comparison is afforded with the figures for England and Wales:—

	Annual Rates per 1,000 of the Estimated Population.					Infant Mortality (Deaths under one year per 1,000 Births).
	Birth-rate.	Death-rate.	Zymotic* Death-rate.	Phthisis Death-rate.	Respiratory Death-rate.	
(1) Urban Districts in the West Riding	19·7	12·4	0·5	0·8	2·2	82
(2) Rural Districts in the West Riding	23·1	11·3	0·5	0·6	1·8	78
(3) <b>West Riding Administrative County</b> ... ..	20·6	12·2	0·5	0·7	2·1	81
(4) <i>England &amp; Wales</i>	19·7	11·6	0·6	0·8	1·9	69

\* Includes Deaths from Diarrhœa, etc., under 2 years of age only.

**Zymotic Disease.**—Particulars regarding the incidence of the seven principal Zymotic Diseases are given below. The combined death-rate from these diseases was 0·53 per 1,000 of the estimated population. .

Zymotic Disease.	No. of Cases 1923.	No. of Deaths 1923.	Ratio of Deaths.	
			(a) per 1000 persons attacked.	(b) per 1000 persons living.
(1) Small-Pox ... ..	278	—	nil	nil
(2) Scarlet Fever ... ..	3580	52	14·52	0·03
(3) Diphtheria and Membraneous Croup ... ..	1148	67	58·37	0·04
(4) Enteric Fever ... ..	169	35	207·1	0·02
(5) Measles ... ..	?	224	?	0·15
(6) Whooping Cough ... ..	?	161	?	0·11
(7) Diarrhœa, &c. under two years ... ..	?	263	?	0·17
Total of chief Zymotic Diseases ... ..	?	802	?	0·53



**Isolation Hospitals.**—The following table gives particulars of the removals to hospital during 1923. Columns 25 to 29 of Table III (see Appendix) show the removals for each district:—

	Total cases notified.	Cases removed to Hospital	
		Number.	Percentage.
Small-Pox ... ..	278	277	99·6
Scarlet Fever ... ..	3580	3125	87·3
Diphtheria and Membraneous Croup ...	1148	984	85·7
Enteric Fever ....	169	146	86·4
Total for 1923 ...	5175	4532	87·6

**Infant Mortality.**—During 1923, 2,519 infants under one year died in the Administrative County, and this gives a rate of 81 per thousand births. The following table gives a detailed analysis of the infant mortality from the various causes of death:—

CAUSE OF DEATH.	Proportion of Deaths to 1,000 Births.					
	Males.			Females.		
	West Riding Admin County		Eng. & Wales.	West Riding Admin County		Eng. & Wales.
	1922.	1923.	1923.	1922.	1923.	1923.
DEATHS UNDER ONE YEAR FROM:—						
Measles ... ..	1·68	1·90	1·72	1·71	1·71	1·26
Whooping Cough ... ..	3·18	2·15	2·45	2·63	2·17	2·58
Influenza ... ..	0·50	0·70	0·42	0·53	0·39	0·35
Diarrhoea, etc. ... ..	7·47	7·73	7·81	5·52	6·44	5·78
Tuberculous Diseases ... ..	2·24	2·41	1·56	1·97	1·38	1·17
Bronchitis and Pneumonia ...	21·48	20·85	15·22	15·56	14·47	11·55
Congenital Debility and Malformation, Premature Birth ... ..	37·66	35·74	33·30	29·08	31·25	25·82
Other Causes ... ..	17·69	23·57	15·82	12·28	9·21	11·51
Totals ...	91·90	95·05	78·30	69·28	67·02	60·02

In this analysis of the causes of death under one year, the County, except in the case of whooping cough, shows a slightly higher rate from each cause than the whole of England and Wales.

Congenital debility, malformation and premature birth occupy the most prominent position, followed closely by respiratory diseases.

Boys show a higher death rate and greater difficulty in rearing than do girls, presumably in accordance with the general law of destiny and development.

The existence of a higher rate for the West Riding than for the whole of the country is probably due to the industrial character of so large a proportion of the County. The industrialisation, which is still going on, results in the progressive urbanisation of County districts, and there is no doubt that the disadvantages of this show themselves in a high infantile mortality rate. We have created a more or less artificial set of conditions and have not yet learned how to combat the adverse circumstances into which babies are introduced. How far this urbanisation has gone in the south of Yorkshire is shown by the fact that it is possible to go for miles in this part of the County from one town to another with very little country intervening.

A study of the places with the highest infantile mortality rates (excluding those with so small a number of births that a very small difference in the number of deaths under one year causes the rate to fluctuate widely) is interesting, though not entirely conclusive. The following districts have an infantile mortality rate above 100:—

*Boroughs and Urban Districts.*—Conisborough, 107; Elland, 106; Horbury, 143; Keighley M.B., 117; Knaresborough, 110; Mexborough, 118; Pontefract M.B., 108; Stanley, 116; Wombwell, 114; Worsborough, 107.

*Rural District.*—Pateley Bridge, 109.

A reference to the Annual Report of the local Medical Officer of Health of ten places with an infantile mortality rate above 100 shows that now one of the greatest factors is congenital debility and prematurity:—

District.	Infantile Mortality Rate.	Total Deaths under one year.	Deaths due to Debility or Pre- maturity.	Notes by local Medical Officer of Health.
Conisborough U.D.	107	60	12	High infantile mortality " probably due in some measure to the debilitating effect of the measles epidemic ...."
Elland U.D.	106	16	11	High infantile mortality " purely accidental, as 11 of these deaths were due to congenital malformations and premature birth. . ."
Horbury U.D.	143	22	13	" Highest infantile rate for many years. . . ."
Keighley M.B.	117	79	24	" The Committee . . . invited the medical practitioners in the borough to a confer- ence in the hope that some useful sugges- tions as to either the cause or the preven- tion of the unduly high mortality might be forthcoming."
Mexborough U.D.	118	47	15	" . . . to effect a fur- ther reduction in the infantile death-rate, it is necessary for pre- ventive measures to be brought to bear at the earliest possible moment of an infant's life, and even before birth, especially in re- spect to these causes of mortality operating at so early a stage of its existence."



District.	Infantile Mortality Rate.	Total Deaths under one year.	Deaths due to Debility or Prematurity.	Notes by local Medical Officer of Health.
Pontefract M.B.	108	51	26	—
Stanley U.D.	116	38	12	“ Prematurity chief cause of excessive infantile mortality.”
Wombwell U.D.	114	56	15	—
Worsborough U.D.	107	31	13	—
Pateley Bridge R.D.	109	14	10	“ I consider that this condition has arisen from the great difficulty there is in getting anyone to give assistance in the work of the household. This necessitates the parturient mothers having to do heavy work at a time when they are not in a fit state for so doing.”

A list of those districts which have an infant mortality rate of less than 65 (excluding those with less than 50 births) is given below :—

*Boroughs and Urban Districts.*—Baildon, 58; Barnoldswick, 60; Brighouse M.B., 56; Burley-in-Wharfedale, 57; Garforth, 27; Greasbrough, 58; Harrogate M.B., 62; Hebden Bridge, 64; Hipperholme, 65; Holmfirth, 38; Horsforth, 50; Kirkburton, 58; Marsden, 19; Meltham, 56; New Mill, 41; Queensbury, 34; Rawdon, 19; Ripon City, 21; Saddleworth, 50; Selby, 48; Silsden, 43; Slaithwaite, 56; Sowerby, 62; Stainland-with-Old Lindley, 38; Thurnscoe, 52; Yeadon, 37.

*Rural Districts.*—Bowland, 36; Halifax, 38; Knaresborough, 54; Sedbergh, 46; Selby, 51; Wetherby, 40; Wharfedale N., 46; and Wharfedale S., 46.

The places with the lowest infant mortality rates are nearly all Rural Districts or small Urban Districts. Thurnscoe Urban District with the highest birth rate in the Administrative County (35.4) has, as will be seen from the list above, one of the lowest infant mortality rates. The new part of Thurnscoe is being laid



out as a model village. The new villages springing up are all laid out much more generously than the old, and the parallelism between the number of people per acre and the infant mortality rate has long been known.

Percentage of County Districts with Infant Mortality :—	Quinquennial Periods.					Year 1923 for Comparison.
	1898-1902	1903-1907	1908-1912	1913-1917	1918-1922	
Under 50 per 1,000 births	3.27	5.72	8.83	9.64	15.92	22.51
50 and under 75 per 1,000 births	5.70	9.45	17.41	18.49	20.26	25.17
75 and under 100 per 1,000 births	10.54	16.29	21.14	24.22	28.03	37.75
100 and under 150 per 1,000 births	37.58	41.67	36.57	39.06	31.18	14.57
150 and under 200 per 1,000 births	34.91	21.27	13.43	7.16	3.82	Nil
200 and upwards per 1,000 births	8.00	5.60	2.62	1.43	0.79	Nil

This table shows in a novel way the progress over 25 years of the improvement in infantile mortality. Taking the separate districts and grading them according to their "blackness" from the point of infantile mortality those below the 100 line of infantile mortality show a gradual movement downwards, i.e., there is a progressively diminishing number of districts with a high infantile mortality. On the other hand, there is a progressively increasing number of districts with a low infantile mortality. The improvement of the total infantile mortality for the County is, if not uniform, at least contributed to by all the districts of the County. Assuming the truth of the dictum that the infantile mortality is a good index to the sanitary condition of a district here is a matter for congratulation and encouragement and stimulus for further effort. The improvement in the figures is more than merely statistical comfort—it means in terms of human life a great saving, and in human emotion a great diminution of sorrow and distress.

*Seasonal Variation in Infant Mortality Rates.*—The following table shows the infant mortality rate in the Administrative County during the four quarters of 1923:—

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.
Infant Mortality	101	88	68	75

The highest mortality rates occur in the winter months. This feature is common to the whole of England and Wales, and the infant mortality curve for the West Riding follows closely that of the whole country. The Registrar-General for England and Wales says:—

“The winter quarter now yields the highest mortality and the summer the lowest without a single exception during the 10 years (1911-20), the autumn (fourth quarter) rate being higher than that of the spring (second quarter) in 7 out of the 10 years. The winter maximum and summer minimum apply moreover at all periods of the first year of life after the first day with very few exceptions, most of which may be explained by the epidemics of diarrhoea and of influenza.”

“The striking features about the winter maximum and summer minimum are their extent and their constancy, at all ages after the first month. . . .”

Although there is a regional increase of infantile mortality from the south to the north of England, it might be expected that the difference between the summer and winter mortality would be greater with the greater differences of winter and summer temperature. Low temperature per se is not likely to cause an increase in the infantile mortality, but it is associated with tendency to overcrowding in houses, and lessening of the proportion of the day spent out of doors. In the winter time the amount of fog is considerably increased. The report of the Medical Research Committee on “The Mortalities of Birth, Infancy and Childhood” points out that “further research is necessary before we can speak with assurance, but the effect may be due to simply irritation of the respiratory organs by solid particles, rendering them liable to invasion by micro-organisms, or it may be due to other constituents of smoke. The infant death rate from respiratory diseases rises rapidly in the winter months, and it is possible that this is not due to the cold to which we generally attribute it, but to the increased pollution of the atmosphere from the larger number of fires, and the precipitation of solid material in foggy weather.”

The Registrar General's report shows that with two or three exceptions the rural districts enjoy a lower infant mortality than the urban districts do. The highest rates are found in industrial towns, and in large towns there is an increase from the periphery to the central parts which rarely receive a wind that has not passed over a smoke-polluted area. When this far-reaching result of atmospheric pollution on the infant death rate is



considered it would seem to furnish the clue to the seasonal variation in the death rate, and to the increased death rate in the colder quarters of the year when the atmospheric pollution is greatest, available sunlight least, opportunity for being out of doors least, and tendency to overcrowding indoors is greatest.

**Cancer, Malignant Disease.**—The death-rate from cancer has shown a constant increase in the Administrative County in common with the rest of the country. In 1900 the rate for the Administrative County was 0·68 per thousand of the population, and had reached 0·88 in 1912. The average death-rate for the ten years 1903-12 was 0·82, compared with 1·06 for the years 1913-22. The table below gives the figures for 1913 and subsequent years.

A Departmental Committee on Cancer has been appointed by the Minister of Health, and they have prepared several important memoranda, which have been issued for the guidance of Local Authorities.

Year.	Administrative County.		England & Wales.
	No. of Deaths.	Death-rate per 1,000 population.	Death-rate per 1,000 population.
1913	1,439	0·94	1·06
1914	1,459	0·94	1·07
1915	1,394	0·97	1·12
1916	1,563	1·11	1·17
1917	1,505	1·15	1·21
1918	1,502	1·11	1·22
1919	1,506	1·05	1·14
1920	1,607	1·07	1·16
1921	1,684	1·11	1·21
1922	1,729	1·15	1·23
Average 1913-1922	1,539	1·06	1·16
1923	1,743	1·16	1·27

The above table is discouraging. The mortality and increasing prevalence of cancer are undoubtedly urgent calls for action by Local Authorities in the mobilisation of all efforts to control the spread of this disease surrounded with such tragic consequences. Of course, the success of control depends mainly on the education of the people, although it must be admitted at the same time that the medical profession are anxiously looking for further information as to the incidence, distribution and ætiology of the disease; and the influences in relation to sex and age.

Certain prominent symptoms, referred to in the leaflet prepared by this Department, give enough knowledge or warning to all enquirers to enable them, at any rate, to relieve their minds of suspicion by consulting a doctor, because it is manifestly obvious that there are many grounds for encouragement, it having been recorded that 76 per cent. of breast cancers and 90 per cent. of bone affections are recoverable if treated in time. Moreover, the earlier the treatment the less drastic, and, although one hesitates to say it, the more economical the remedy, and the greater the chances of success. The prominent symptoms of cancer are:—

- (1) *External or exposed forms*, as persistent nodules, sores on the lips, forehead, nose, cheek, etc.;
- (2) *Stomach*. Indigestion, prolonged marked acidity and flatulence with constantly dirty tongue and loss of weight with or without pain, which is often severe and especially some little time after food;
- (3) *Uterus*. The cancer period is usually after 40 years of age. Unusual discharges or bleeding with loss of weight or stabbing pains demand thorough investigation as to the cause;
- (4) *Breast*. Any nodule or swelling or lump with pain on pressure should come immediately under medical observation, and with every hope of successful extermination.

It is to be remembered that these danger signals do not necessarily mean cancer, but they should lead to immediate consultation with a doctor and thorough examination. It may be simply piles, diarrhoea, or indigestion. Needless worry should be avoided as to whether the disease is more prevalent in these days, whether it is contagious and the story of "cancer houses" has any foundation, and whether the disease is inherited or is a "blood disease," because all these can be answered by "No."

The question of notification is, of course, being freely discussed, but the majority are of opinion that the time is not yet mature for such action, as they believe that the general procedure adaptable to the combating of infectious diseases is not applicable in the case of cancer.

**Smallpox.**—The outbreak of smallpox, which occurred in the Doncaster area (Borough and surrounding Urban and Rural Districts) during the latter part of 1922, continued into 1923. Though gradually abating towards the summer in the Borough the disease remained prevalent in the surrounding districts during the whole year.

Doncaster Borough had 113 cases.

Doncaster Rural           ,,   51   ,,

Adwick-le-Street       ,,   30   ,,

Bentley-with-Arksey   ,,   77   ,,

All were treated in Hospital, and there were no deaths.



Prompt measures taken by the Medical Officers of Health, viz., notification, removal to hospital, disinfection of infected premises, vaccination, supervision of contacts and warning by means of bills, etc., were successfully carried out.

The disease has been of the same mild character as heretofore in the Riding, the amount of disfiguration, even in unvaccinated cases, being very slight and the illness very transient, and therein lies a very real danger, because at present smallpox may be looked upon as of very little importance, whereas no one can foretell when the type may change to one very infectious, very malignant and very fatal.

All over the County, as, in fact, one may say all over the country, infant vaccination has fallen into desuetude—not more than 25-30% of the population in many districts being protected by this means—a deplorable state of things if anything in the nature of the old type of smallpox were to supervene. In the districts where there has been a small scare, however, a good deal of work has been done by the public vaccinators, but nothing to what ought to be.

A few isolated cases were notified during the year, one each from Hebden Bridge, Linthwaite, Slaithwaite, Pontefract, Todmorden Borough, Todmorden Rural, and Wakefield Rural, investigation and detection of the source and prompt measures being taken in these cases preventing an outbreak.

There has been quite a number of suspected cases in the Riding where assistance in diagnosis has been requested by practitioners, and all these have been promptly attended to, and diagnosis confirmed or otherwise. This practice I encourage in all doubtful cases of infectious disease, as it may effect a very real economy both in life and money to find at its source a probable epidemic in a district.

**Encephalitis Lethargica.**—The following is a record of the number of cases notified in the West Riding Administrative County since the beginning of 1921:—

1921	37 cases	1923	23 cases
1922	16 cases	1924 (to end of May)	90 cases

The incidence of the disease in the West Riding as in the whole of England has been widespread, cases occurring sporadically in many sanitary areas. During April and May, 1924, there has been a definite increase in the cases surrounding Sheffield, itself affected by quite a small epidemic.

Encephalitis Lethargica is an infectious disease of low infectivity ( $\cdot 02$  per 1,000), the nature of the spread of which is not known, nor has the specific germ been discovered, but it has always been associated in fatal cases with a definite pathological lesion in the brain. The salient symptoms of the disease are headache, progressive lethargy, double vision, with sometimes vomiting, but the disease assumes quite a variety of types.

Since 1920 careful supervision has been kept over the County notifications, but the Ministry of Health have now abandoned their schedule of enquiry. One on the same lines, however, has been issued to the district Medical Officers of Health from this Department after each notification, and this has been courteously completed and returned to me with all available information in about 75% of cases. Facilities have also been given to practitioners in the West Riding for consultation in suspected cases, and this has been taken advantage of.

An analysis of the returns, especially those for the present year, shows that it is not definitely associated with any other disease—although at one time and even now in the lay press influenza is supposed to be an exciting cause—thus agreeing with the Ministry report, which says “Encephalitis Lethargica is a disease unto itself and cannot be considered as a nervous form nor complication of Influenza.” It also shows that middle life seems to be the most critical age of incidence, that occupation has no influence whatever, and that both sexes are equally susceptible.

There is as yet a want of precision in dealing with the disease, as no authentic curative measures have been discovered, but in their Memo. (45—Med.) the Ministry of Health recommend (a) In view of the severity of the disease and the importance of good nursing, it is important to secure hospital treatment as far as possible, and the isolation hospitals of Local Authorities should generally be available for this purpose; (b) Any public nursing arrangements should be made available by the local Sanitary Authority for cases treated at home.

The precautions to be taken against infection include the following, but these are suggested for “contacts” chiefly:—

- (1) Strict cleanliness of the hands and person generally,
- (2) Nasal spray and gargle of—
  - (a) 1% solution of peroxide of hydrogen,
  - (b) 0.5% Liquor sodæ chlorinatæ, and
  - (c) a solution of permanganate of potash, 1 in 5,000.

**Water Supplies.**—During the year we dealt with complaints on the inadequacy of the water supply at Bishop Monkton in the Ripon Rural District, which proved justifiable. There is no proper storage capacity, and when the inhabitants at the low end of the village are drawing water the flow ceases at the houses at the upper end. The District Council caused an examination of the mains (2", and laid 40 years ago) to be made. Some of the joints were leaking. The Council made the defective joints good, and as a temporary expedient arranged for a re-adjustment to be made of the principal controlling valve, so as to give the necessary pressure at stated periods at the higher levels.



The water supply of Wistow in the Selby Rural District was again the subject of consideration. The Council has caused a Scheme to be prepared, but it was held up owing to war restrictions and had remained in abeyance until Septemebr, 1923, when it was decided in conjunction with the local Medical Officer of Health to test representative wells in the Parish as to their purity. Nine samples examined bacteriologically were all polluted; 26 samples were examined chemically, and only one was reported pure and fit for drinking purposes, but bacteriologically this was impure. Eight were reported as pure but contained so much saline matter as to render them unfit for domestic use and undesirable for drinking purposes; of these five only were examined bacteriologically and found to be polluted. Five were pure but contained an excess of nitric nitrogen and were so excessively hard as to be unsuitable for drinking and domestic use; three were of doubtful organic purity, and too hard for drinking and domestic use, and 6 were seriously polluted. On these results the Selby Rural District Council were asked to prepare a scheme for providing a pure water supply for Wistow.

*Lead Poisoning.*—A number of samples were collected during the year and examined for plumbo-solvency.

**Cowsheds and Milk Supply.**—Since the issue of my report on the General Condition of Cowsheds in the Administrative County, which was circulated to Sanitary Authorities last year, several reports on investigations made into the condition of the cowsheds have been received from various Local Authorities, and a perusal of these reports shows that there is much room for improvement in respect to cleanliness, ventilation, lighting and construction generally.

It is pleasing to note, however, from the reports received that the suggestions made in my report are being carried out, and statutory notices have been served on milk producers and purveyors in the various districts with a view to the regular cleansing and limewashing of cowsheds and premises, and the remedying of existing defects therein, in accordance with the requirements of the Dairies, Cowsheds and Milkshops Orders.

This matter is receiving careful consideration by the Milk Supply Sub-Committee which has been appointed to deal with all matters relating to the production and distribution of milk.



## Sale of Food and Drugs Acts.

### Quarterly Report of Samples taken during 1923.

District.	Inspector.	Samples analysed during 1923.				
		First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total.
Barnsley ...	J. H. Bundy ...	72	67	57	67	263
Central ...	A. Ross ...	104	90	51	96	341
Harrogate ...	H. Gamble ...	63	53	12	77	205
Mirfield ...	E. Ward ...	107	99	83	88	377
Pontefract ...	H. F. Wilkinson	109	48	63	75	295
Rotherham	J. Wilson ...	77	101	63	112	353
Shipley ...	J. Duce ...	79	90	80	78	327
Skipton ...	A. Randerson ...	91	73	77	85	326
Sowerby ...	E. Bell ...	116	97	107	100	420
Total Samples taken by the County Inspectors ...		818	718	593	778	2907
Local Authorities ...		129	174	132	280	715
Private Purchasers ...		—	—	—	—	—
Total Samples analysed		947	892	725	1058	3622

The above total of 3,622 includes 38 "cow" samples (i.e., samples taken at the farms to test for quality). This frequently entails early morning visits, and of these 38 "cow" samples 34 were taken by County Inspectors, and 4 by Sanitary Inspectors of Local Authorities. Not including the "cow" samples, 1,371 samples of milk were taken by the County Inspectors and 644 by local Sanitary Inspectors, making a total of 2,015; of this total 155, or 7·6%, were adulterated.

### Record of Samples for Ten Years, 1914-1923.

Year.	Total Samples submitted by			Total Examined.	Total Adulterated.	Percentage Adulterated.
	County Council.	Local Authorities.	Private Purchasers.			
1914	2668	744	4	3416	229	6.7
1915	2674	714	—	3388	179	5.2
1916	2543	729	—	3272	204	6.2
1917	2425	653	—	3078	319	10.3
1918	2201	581	—	2782	349	12.5
1919	2102	580	—	2682	231	8.6
1920	2928	644	—	3572	238	6.7
1921	3065	657	—	3722	237	6.4
1922	2926	658	—	3584	190	5.3
1923	2873	711	—	3584	182	5.1

The figures in above table do not include the 38 "cow" samples.

*Samples taken by Local Authorities.*—The following table shows how many of the †715 samples submitted by Local Authorities were taken by each Authority. Those marked with an asterisk submit samples of milk under the scheme whereby the County Council pays for the cost of analyses of such samples, and conducts any subsequent legal proceedings:—

*Barnoldswick ... 8	*Hemsworth ... 9	Ripon City ... 34
Batley B. ... 60	*Horbury ... 12	*Rothwell ... 45
*Bolton-on-Deane 5	*Horsforth ... 2	Spenborough ... 50
*Brighouse B. ... 24	*Hoyland Nether 8	*Thurstonland ... 9
*Castleford ... 14	*Ilkley ... 25	*Todmorden B... 18
*Elland ... 22	*Keighley B. ... 45	*Whitwood ... 2
*Featherstone ... 20	*Methley ... 3	*Wombwell ... 1
*Garforth ... 17	*Mexborough ... 17	*Worsborough ... 8
*Golcar ... 9	*Mirfield ... 5	*Hemsworth R... 5
*Goole ... 16	*Normanton ... 4	*Kiveton Park R. 19
Harrogate B. ... 105	Pontefract B... 3	*Knaresbro' R... 5
*Haworth ... 18	*Pudsey B. ... 32	Wakefield R. ... 13
*Hebden Bridge 4	*Rawmarsh ... 19	

† includes 4 "cow" samples.

*Milk and Cream Regulations.*—All samples of milk and cream were examined for preservatives, and in two instances only were offences against the regulations observed, viz., one in a sample of milk which contained 1·07% formaldehyde, and another, also milk, which contained ·191% of boric acid.

*Preservatives in Food Stuffs.*—The addition of chemical preservatives in food is still somewhat widely suspected, and I have revised the list of food stuffs which are to be periodically purchased by our Inspectors.

This subject was dealt with by me in a memorandum dated 8th February, 1915, and, as I then pointed out, I am of opinion that from a physiological standpoint chemical preservative in food is undesirable.

If proper care is exercised in the preparation of food, especially as to cleanliness of utensils, and the temperature of the shop or store, the necessity for the addition of drugs as preservatives would be very remote and should therefore only be permissible in exceptional circumstances.

Amongst a number of food stuffs examined during the year for preservatives, four samples of sponge cake contained from 14 to 21 grains per pound of Boric Acid, and as the maximum medicinal dose of this drug is 15 grains, and this commodity is largely consumed by children, I consider this to be an excessive amount. Another sample of food examined for chemical preservative was sausage, and this was found to contain no less than 63 grains in one pound.



In 1923 3,580 samples of various food stuffs were taken for the purpose of examination for preservatives, and 160, or 4·4%, were found to contain drugs used as preservatives in various proportions.

The Ministry of Health has issued a circular to Local Authorities regarding the presence of boric acid in cake, which was mainly due to the use of liquid whole egg, a material manufactured from imported egg yolks preserved by boric acid. The Ministry, after discussion with representatives of the Bakery Allied Traders' Association, came to an agreement whereby a reduction in the amount of this preservative was effected.

Since the above was written, the Final Report of the Departmental Committee on the use of Preservatives has been issued (October, 1924), and recommends that, with few exceptions, preservatives should be prohibited in all articles of food and drink offered or exposed for sale, whether manufactured in this country or imported.

*Sunday Milk Sampling.*—Special instructions were given to Inspectors to pay surprise visits to various districts for the purpose of obtaining samples from the Sunday morning milk supplies. Of the 22 samples thus obtained the results of the analyses show that all were genuine, but two were "poor" in respect of fat constituents.

*The Public Health (Condensed Milk) Regulations, 1923,* came into operation on the 1st November, 1923, and provide for the proper labelling of tins or other receptacles, and prescribe conditions for the composition and sale of condensed milk.

*Milk (Special Designations) Order, 1923.*—The Ministry of Health has issued a new Order which embodies various amendments and revokes existing Orders as from 1st July, 1923.

*Milk Sampling in Sanatoria.*—Samples from the milk supply to the various sanatoria have been frequently examined as to quality, and in one instance where adulteration was found to the extent of 7·8% added water, proceedings were instituted, with a resultant penalty of £5 and costs against the vendor.



TREATMENT OF VENEREAL DISEASES.

The following is a table showing the Venereal Treatment Centres and the number of attendances, etc., during 1923.

Name of Institution.	Days and Hours of Attendance.		No. of New Patients attending Clinics during 1923.	No. of doses of Arsenobenzol compound used at Clinics.	No. of In-Patient Days.	No. of Out-Patient Attendances.
	Men.	Women and Children.				
Bradford Royal Infirmary	Monday and Saturday, 9.30 a.m.; Tuesday, 6 p.m.	Monday, 4 to 6 p.m. ... Tuesday and Friday, 10 a.m.	136	571	651	3786
Burnley Victoria ...	Monday, 5.30 to 6.30 p.m.	Friday, 11 to 12 noon ...	9	3	46	31
Dewsbury Infirmary	Monday, 3 to 5 p.m.	Monday, 3 to 5 p.m. ...	65	505	97	1746
Doncaster Royal Infirmary	Thursday, 6 to 8 p.m.	Thursday, 6 to 8 p.m. ...	162	765	19	4219
	Wednesday, 4 to 6 p.m.	Monday, 4 to 6 p.m. ...				
Goole, Bartholomew Hospital...	Friday, 8 p.m.	Friday, 4 to 6 p.m. ...	37	64	10	304
	Tuesday, 3 p.m.	Friday, 5 p.m. ...				
Leeds General Infirmary	Wednesday, 6.30 p.m.	Monday, 3 p.m. ...	256	2719	1	6050
Barnsley Clinic	Thursday, 6 to 8 p.m.	Thursday, 6.30 p.m. ...	97	234	—	4509
	Saturday, 3 to 5 p.m.	Thursday, 3 to 5 p.m. ...				
Halifax Royal Infirmary	Thursday, 6 to 8 p.m.	Tuesday, 3.30 to 5.30 p.m. and 6 to 8 p.m.	110	269	613	1595
Huddersfield Royal Infirmary	Tuesday, 6.30 to 8.30 p.m.	Monday, 7 to 9 p.m. ...	84	250	86	1289
Keighley Victoria Hospital	Thursday, 7 to 9 p.m.	Friday, 6 to 8 p.m. ...	93	413	42	3081
	Tuesday and Thursday, 7.30 to 8.30 p.m.	Tuesday and Thursday, 6 to 7 p.m.				
Oldham Royal Infirmary	Tuesday, 8.30 p.m.	Tues., Wed. and Thurs., 3 p.m.	5	12	—	79
	Monday, 3 to 4 p.m.	Wednesday, 3 to 4 p.m. ...	4	21	—	121
York County Hospital	Thursday, 6 to 7 p.m.	Friday, 7 to 7.30 p.m. ...				
Rotherham Hospital (Wellgate)	Friday, 7.30 to 8 p.m.	Friday, 8 p.m. ...	38	100	—	508
	Tuesday, 8 p.m.	Friday, 3 to 5 p.m. ...	155	508	147	2837
Wakefield Clayton ...	Wednesday, 6 to 8 p.m.; Friday, 10 to 12 noon	Friday, 3 to 5 p.m. ...				
		Totals	1251	6434	1712	30155

The following is an analysis of the foregoing table in comparison with previous years:—

Year.	New Patients.	Doses of Arsenobenzol Compounds.	In-patient Days.	Out-patient Attendances.
1920	2043	10259	2119	24552
1921	1434	8229	1540	30606
1922	1114	6685	974	27971
1923	1251	6434	1712	30155

A Clinic was opened at the Clayton Hospital, Wakefield, on 2nd April, in conjunction with the Wakefield Corporation, and during the year has more than justified its existence, giving facilities for treatment to some who otherwise would never have been able to afford the necessary time, and incidentally tapping sources of infection, which can only be done through a centre. The figures in the yearly analysis remain much the same as last year, taking this new clinic into consideration. The alteration and reconstruction at the Doncaster Centre giving more facilities for irrigation has been instrumental in adding to the number of new patients, and more particularly the intermediate attendances. There is no doubt that the more efficiently equipped a centre is, the more the patient appreciates the specialist treatment, and the more likely is he to continue attendance until assured of cure. To the skill and tact of the medical officer must necessarily be added just the same attributes on the part of the male attendant and nurse who look after the intermediate treatment, for on their methods, patient understanding and tactfulness rests much of the success of a clinic.

The relations of the West Riding with the County Boroughs and Hospitals, with whom agreements stand, continue to be most amicable, and everything is done by the medical officers to give opportunities for advice and treatment, even outside the advertised time of the clinics, the welfare of the patient and the uprooting of a source of infection being the first consideration.

*The Hope Hospital.*—Considerable advantage has again been taken of this Hostel during the year. In all 10 patients have been treated who would otherwise have remained in an infectious state. The aggregate period of detention numbered 592 days. The majority of the patients suffered from Gonorrhœa.

*General practitioners approved* in accordance with the Ministry of Health requirements to receive Arsenobenzol Compounds now number 52, and 207 doses were supplied during 1923.



*Our campaign of education* during the year has been largely conducted by a lecturer from the National Council (Mr. T. B. Partington) with the "cinemotor" lorry, for which the County Council voted the sum of £100.

The opening of the venereal diseases clinic at the Clayton Hospital, Wakefield, in the Spring was thought to be a suitable time for a general campaign in the districts which would benefit by the clinic. My Committee therefore drew out a programme of work, armed with which Mr. Partington spent a month in and around Wakefield, doing most excellent work in factories and workshops during the day, and in clubs and schools in the evening, showing films most suitable to his audiences, and there is no doubt of the result from this form of propaganda. His services were again utilised in the Autumn in a totally different part of the Riding, but amongst the same industrial type of the community.

During this visit, through the courtesy of one of the cinema proprietors, we were able to give a private demonstration to local medical practitioners, County Councillors, nurses, etc., of several public health films belonging to the National Council, in addition to films dealing with venereal diseases.

## HOUSING.

A change in the political situation during the year has once again caused a revision of the housing policy. The new Government introduced another Act on the 31st July, 1923, which amended the enactments relating to the Housing of the Working Classes Act, and terminated the arrangement then in force under the 1919 Act, whereby the loss to be incurred by Local Authorities was limited to a rate of 1d. in the pound. It also terminated the power to contribute to costs incurred by Public Utility Societies and Housing Trusts up to 30% of the annual loan charges, and substituted for these a contribution by the Government to Local Authorities of a subsidy of £6 per house for 20 years. The new Act also gave power to Local Authorities where they could satisfy the Ministry of Health that the provision of houses could not be met by private enterprise, without assistance, that they could give assistance either in a lump sum grant or an annual payment for a period of 20 years to the person by whom the rates were paid, or periodical payments to a Building Society or other body of persons.

The assistance which could be given in a lump sum by Local Authorities to induce private enterprise to proceed with the building of houses may be more or less than £6 per house for 20 years, but the Local Authority must bear this extra cost where more than £6 is given; and some Authorities have given more than that amount.

The houses that would qualify for assistance include (a) two-storey cottages, (b) one-storey cottages or bungalows, or (c)



houses built in flats. Houses not eligible embrace army huts or houses that have been converted, adapted or extended, houses contained or used for occupation as an office, shop, business premises, garage, stable or similar buildings, or houses built to replace loss by fire. The size of houses is limited—two-storey houses to a maximum of 950 superficial feet and a minimum of 620 superficial feet, and one-storey houses to a maximum of 880 superficial feet and a minimum of 550 superficial feet. In special circumstances a smaller house could be built with a minimum area of 570 superficial feet for two-storey houses, and 500 superficial feet for one-storey houses or flats. A maximum density is not prescribed but the Minister of Health is of opinion that a density of approximately 12 houses per acre represents a desirable standard, and Local Authorities should not approve of more than 20 houses on any one acre.

Every house must have a fixed bath, unless the Ministry of Health, on the recommendation of the Local Authority, approve otherwise. Under the 1919 Scheme the specific approval of the Ministry of Health was required in regard to the rents to be charged for houses erected by Local Authorities, but under the 1923 Scheme such approval will not be required.

The houses qualifying for subsidy must be completed by 30th September, 1925, unless there are special reasons over which the Local Authority have no control which prevent completion; then the time may be extended to the 1st June, 1926.

The Ministry of Health have power to give like contributions to Public Utility Societies, who are willing to undertake the construction of houses of the size and type that are fixed for Local Authorities, and the same time limit applies.

During the year 1923, under the Government Assisted Housing Schemes, 2,765 houses have been completed in the Administrative County area, against 6,010 in 1922, a decrease due to the Government "cut" at the latter end of 1921, and the fixing of a limit to the number of houses to be built under the 1919 Scheme. Of the 2,765 built, 2,107 were provided under the 1919 Scheme, and 658 under the Scheme of 1923. The distribution of the 2,107 houses of the 1919 Scheme were as follows:—

(a)	Erected by Borough Councils	...	...	54
(b)	„ „ Urban Councils	...	...	1019
(c)	„ „ Rural Councils	...	...	1021
(d)	„ „ Private enterprise	...	...	13

The houses erected under the 1923 Scheme were as follows:

(a)	Erected by Borough Councils	...	...	72
(b)	„ „ Urban Councils	...	...	127
(c)	„ „ Rural Councils	...	...	6
(d)	„ „ Private enterprise	...	...	152
(e)	„ „ Public Utility Societies	...	...	301

In addition to the 2,765 houses provided by the Government Assisted Housing Scheme, our returns from the local Medical Officers of Health show that 1,084 other houses were erected during the year, making a total of 3,849 houses provided during 1923, a deficiency of 1,151 houses as judged by our pre-war yearly standard. Add this deficiency to the estimated shortage as shown in my report for 1922 (37,500), we get a shortage to-day of 38,600 houses in the West Riding Administrative area.

It may be of interest here to notice what has been the nett result in the Administrative County Area of the provision of houses under each of the Government Assisted Housing Schemes since their inception in 1919 up to the 31st December, 1923, as set out in the foregoing table:—

Agencies.	1919 Scheme.	1923 Scheme.	Total.
Borough Councils	1234	72	1306
Urban District Councils	5394	127	5521
Rural District Councils	4213	6	4219
Public Utility Societies	756	301	1057
Private Builders	2225	152	2377
	13822	658	14480

*Housing Inspections by Local Authorities.*—The number of inspections made and recorded in 1922 by Local Inspectors under the Housing (Inspection of District) Regulations, 1910, is again less than last year, which was less than the previous year. These results show that there is not that attention being given to the carrying out of the Housing Regulations which the subject demands, especially in regard to houses not in all respects reasonably fit for occupation. The reports sent in by our Health Visitors, Nursing Staffs, and our own Inspectors show that there is an urgent need for more rigorous action by Local Authorities.

The following tables indicate the position of Urban and Rural Districts and the results of the inspections:—

Authorities.			Remarks.
Urban.	Rural.	Total.	
100	22	122	Total inspections, 14,186 houses (11,895 Urban and 2,291 Rural)
22	6	*28	No inspections recorded.
122	28	150	



The results of the inspections were:—

	Urban. Districts.	Rural Districts.	Ttl.
Houses found unfit ... ..	214	90	304
Unfit houses represented to Authority for closing	108	33	141
Closing Orders made ... ..	66	33	99
Houses made fit after Closing Orders ... ..	33	18	51
Houses with defects remedied without Closing Orders ... ..	3905	999	4904

\* The Districts where no inspections are recorded are as follows:—

Birstall U.D.	Linthwaite U.D.	Tickhill U.D.
Farnley Tyas U.D.	Luddendenfoot U.D.	Wath-upon-Dearne
Farsley U.D.	Marsden U.D.	U.D.
Greasbrough U.D.	Morley M.B.	Whitwood U.D.
Greetland U.D.	Normanton U.D.	Bowland R.D.
Gunthwaite & Ing. U.D.	Queensbury U.D.	Great Ouseburn R.D.
Hoylandswaine U.D.	Rishworth U.D.	Hunslet R.D.
Kirkburton U.D.	Shelley U.D.	Keighley R.D.
Knottingley U.D.	Southowram U.D.	Pontefract R.D.
	Sowerby U.D.	Ripon R.D.

In 17 Urban Districts there were 18 or less inspections made, viz.:—

Bentley-with-Arksey ... 8	Oakworth ... 8
Birkenshaw ... 4	Scammonden ... 8
Bolton-upon-Dearne ... 3	Shelf ... 15
Clayton West ... 16	Skelmanthorpe ... 18
Conisborough ... 9	Skipton ... 14
Earby ... 12	Slaithwaite ... 17
Gildersome ... 2	South Crosland ... 15
Horbury ... 8	Springhead ... 12
Mytholmroyd ... 14	

In 6 of the 28 Rural Districts there were 16 or less inspections, as follows:—

Halifax ... 9	Skipton ... 11
Ripon ... 11	Todmorden ... 13
Settle ... 5	Wharfedale ... 16

Thirteen of the local Annual Reports do not give either the particulars required by the Government's Sanitary Officers Order, 1922, in regard to housing, or our Table D:—

Hoylandswaine	Meltham	Southowram
Kirkburton	Midgley	Sowerby
Knottingley	Normanton	Wath-upon-Dearne
Luddendenfoot	Queensbury	Whitwood

and the Rural District of Pontefract.

No action has been taken by any of the Local Authorities with regard to obstructive buildings, and only two Authorities record action under Unhealthy Areas, viz.:—



*Keighley Borough.*—The Westgate insanitary area of 4½ acres, 143 inhabited houses, 370 rooms, 561 persons, a tannery, a public abattoir, 2 chapels and 2 disused grave yards. The Ministry of Health held an Inquiry on 20th November, 1923.

*Sowerby Bridge Urban District.*—The Medical Officer of Health made his representation in March, 1923, embracing two areas, namely, Stansfield Court and Old Causeway. The combined area contained 846 acres, with a population of 175. The Ministry of Health held an Inquiry on 22nd November, 1923.

None of the Local Authorities appear to have acquired any houses for division into tenements, but in one district—Soyland—one large house has been converted by a private person into 5 working class houses.

There have been no complaints by any Local Government electors under Section 31 of the 1890 Act, as amended by the 1923 Act, nor by any Parish Council under Section 62 of the Local Government Act, 1894, nor has any action been recorded under the Small Dwellings Acquisition Acts, 1899-1923.

The Reports of the Local Medical Officers of Health confirm generally my own opinion as to the scarcity of houses and as to the impossibility of dealing with over-crowding, unfit houses, houses not in all respects reasonably fit, owing to there being no available dwellings for the people dispossessed if the proper legal action were taken thereon. I am daily faced with extreme difficulties arising out of reports from our Health Visitors and Nurses regarding visits to houses when on Child Welfare or Tuberculosis work.

In my opinion there is a crying need for a much greater effort to be made by our Sanitary Authorities in regard to housing, and much can be done to improve houses not in all respects reasonably fit. There is also much room for action in regard to the carrying out of inspections, and the keeping of accurate records under the Housing (Inspection of District) Regulations of 1910, and the Sanitary Officers Order, 1922.

I have once more to complain of general delinquency anent the statutory duties imposed on the officers of Rural District Councils by Section 45 of the Housing of the Working Classes Act, 1890, and extended by Section 69 of the Housing, Town Planning, etc., Act, 1909, in regard to furnishing me with copies of all representations, complaints, or information as to unfit dwelling houses, obstructive buildings, or closing orders made in their districts.

Our own work in regard to housing has covered the inspection or re-inspection of the Urban Districts of Birstall, Dodworth, Emley, Garforth, Heckmondwike, Hoyland Nether, Hunsworth, Kirkheaton, Knottingley, Marsden, Mirfield, Skelmanthorpe, Slaithwaite, South Crosland, Southowram, Soyland, Stainland,

Stanley, Worsborough and Yeadon, and the Barnsley Rural parishes of Carlton and Woolley, the Goole Rural District parish of Snaith and Cowick, and the Penistone Rural parishes of Cawthorne, High Hoyland and Silkstone, of which details are preserved on the files of this Department.

Assistance has been given to many Sanitary Districts, especially Clayton, Hebden Bridge, Hoyland Nether, Knottingley, and Wath-upon-Deane Urban Districts, in regard to housing matters.

*Sanitary Surveys.*—During the year a Sanitary Survey of the Dewsbury Union was commenced, and the Urban Districts of Birkenshaw, Birstall, Heckmondwike, Mirfield, and Spenborough were examined in detail in regard to the whole of the sanitary circumstances of each district.

### TOWN PLANNING.

*Leeds and Bradford Region Joint Town Planning Committee.*—A Conference was called by the Ministry of Health on the 6th March, 1923, of 50 Local Authorities around Leeds and Bradford to consider the need for co-operation in the preparation of Town Planning Schemes amongst the Local Authorities concerned, when it was decided to establish a Joint Town Planning Advisory Committee. The statistics put forward showed that the acreage of the proposed region was 172,357, the population at the Census of 1921 being 250,864, and the rateable value at the 1st April, 1922, was £8,200,164.

The West Riding were invited to send one representative to attend the meeting, but with no voting power. County Councillor E. Illingworth was appointed the West Riding representative. Subsequently the Advisory Committee was formed, with the Town Clerk of Leeds as Honorary Secretary, a constitution and functions were agreed upon, with the appointment of a duly qualified Surveyor to act as chief Surveyor at £1,000 per year.

*Halifax, Huddersfield and District Regional Committee.*—The Halifax Corporation on 1st August, 1923, invited 44 districts to send representatives to a conference held at the Town Hall, Halifax, on the 4th October, 1923, and 21 districts, including the West Riding County Council, attended. The area of the proposed region was 185,242 acres, the population at the Census of 1921 was 434,691, and the rateable value £2,963,393. Resolutions were adopted recommending the Local Authorities in the area to form a Joint Town Planning Advisory Committee, and that the West Riding County Council be invited to send one representative to attend the meetings. Mr. William Holmes, the County Sanitary Inspector, was appointed as the County Council representative.

*Horbury Urban District.*—In accordance with the Town Planning Regulations the Horbury Urban District Council, in March, 1923, forwarded to us a draft of their preliminary statement and map No. 2, which had been deposited for public inspection. The



whole of the district is included in the Scheme. There are 25 scheduled streets. It is really a street improvement scheme rather than a Town Planning Scheme and ought to be improved for the relief of the centre of the town and the development of unbuilt areas. There are only two zones—residential and industrial, which can be varied by consent of the Council, subject to the approval of the Ministry. The density of the houses to the acre is fixed at 20, whereas the actual practice in the country is for the average to be at the most 12, and the maximum on any one acre 20 dwellings.

*Clayton Urban District.*—On the 26th April, 1923, the Ministry of Health held an Inquiry into the Council's application for approval of the preliminary statement of proposals of development in connection with their Scheme.

*Baildon Urban District.*—The Baildon Urban District Council on 6th December, 1923, forwarded a copy of their draft preliminary statement, and map No. 2, which was deposited for public inspection. This plan and preliminary statement embrace the whole of the Urban District. The Scheme has been conceived on right lines and with a few amendments would make an excellent scheme for the future development of the district.

It provides for the widening of 9 roads. Fifteen other roads are in part to be widened and in part new. There are 11 entirely new roads, and one in part new.

The zoning shows that the bottom of the Aire Valley is to be reserved generally for industries. Four zones are shown for dwellings, 704 acres being restricted to 12 houses to the acre, 252 acres to 8 houses to the acre, and 596 acres to 6 houses to the acre, and 156 acres to 4 houses to the acre. Sixteen parcels of land, embracing 874 acres, are to be kept as open spaces. The main road (Road No. 2 on plan) from Baildon Bridge to Tong Park is scheduled for widening to 100 feet in width, and may need watching by the Highways Department; so may road No. 3, which is shown to be in part widened and in part new, 100 feet in width from the western end of road No. 2, along the Valley past Saltaire Park to the western boundary of the district.

*Leeds Schemes affecting the West Riding.*—In May, 1923, the Town Clerk of Leeds informed the County Council that the Harehills, Roundhay and Crossgates Scheme and the Moortown Scheme had been abandoned, and that on the 7th of March the Leeds City Council decided to prepare Town Planning Schemes No. 2 and No. 3, each of which affected some portion of the West Riding Administrative Area. In May the Ministry of Health approved the resolutions so as to permit the preparation of preliminary statements.

Scheme No. 2 affects about 152 acres of the parish of Alwoodley in the Wharfedale Rural District, and No. 3 affects about 8 acres in the parish of Templenewsam, and 77.5 acres in the parish of Austhorpe in the Tadcaster Rural District.

## PART II.

## THE WORK OF THE BACTERIOLOGICAL LABORATORY.

The specimens examined in the Laboratory during the year, including those from the County Boroughs of Wakefield, Dewsbury, Halifax, Barnsley and Huddersfield, numbered 19,396. The number (exclusive of Venereal specimens, which are given separately on page 34) examined for the County Borough of Wakefield was 914, for the County Borough of Dewsbury 11, and for the County Borough of Huddersfield 1.

The following table gives the figures for 1923 in comparison with those for the previous five years:—

Year.	Serum reaction for Enteric Fever.	Sputum for Tubercle Bacilli.	Suspected Diph- theria.	Venereal Disease.	Miscel- laneous.	Total.
1918	434	4995	5129	1492	1883	13933
1919	361	4581	7905	2548	2118	17513
1920	347	6368	10245	2844	2871	22675
1921	1044	4747	9830	2732	3266	21619
1922	658	3869	8938	2717	3480	19662
1923	592	4468	8087	2760	3489	19396

During the year 141 specimens were received which required biological examination.

**Diphtheria.**—During the year 8,087 swabs were examined for the diphtheria bacillus. Medical Officers of Health and practitioners submitted 8,061 specimens from suspected cases and convalescents, of which 1,006 were positive.

The School Medical Inspectors submitted 22 swabs from suspected cases among children attending school, and in 3 cases the result was positive.

The Central Staff collected 4 swabs in connection with outbreaks of diphtheria, all of which were negative.

The diphtheria bacillus was isolated from 2 persistent cases of nasal diphtheria and tested for virulence with positive result in 1 case.

**Enteric Fever.**—Examination for the Widal Reaction.—During the year 592 specimens of blood were examined, and 155 were found to give a positive result.

Examination for the Bacillus Typhosus.—The number of specimens examined was 152 and consisted chiefly of samples of urine and faeces from convalescent cases and suspected carriers.



Of these 4 specimens of faeces, and 1 portion of bowel were found to contain the typhoid bacillus.

**Paratyphoid Fever.**—Eight specimens were examined, with negative result.

**Dysentery.**—Fourteen specimens of faeces were examined, and in 3 the *Bacillus Dysenteriae* (Flexner type) was found.

**Tuberculosis.**—Sputum.—The number of specimens examined for tubercle bacilli was 4,468, and in 1,113 the bacillus was found. Medical Officers of Health and practitioners submitted 2,250 specimens, the Tuberculosis Staff 2,199 (from Sanatoria 735, and from Dispensaries 1,464), and 19 specimens were received from Hospitals.

**Urine.**—Eighty-seven specimens from suspected cases of tuberculosis of the kidney and bladder were examined, and in 11 the bacillus was found.

**Other Specimens.**—The remaining specimens examined for tubercle bacilli were: 30 of pus, 19 of pleural fluid, 7 of faeces, 2 of ascitic fluid, and 1 fluid from knee. In 4 of these the tubercle bacillus was found.

**Bovine Tuberculosis.**—Milk.—Twenty-seven specimens (22 from individual cows and 5 mixed samples) were examined, and in 8 samples from individual cows the bacillus was found.

**Other Specimens.**—Twenty-five specimens were examined, namely: 15 of glands, 6 of liver, 2 tissue from head, 1 portion of tongue, and 1 of kidney. In 2 of these the bacillus was found.

**Ringworm.**—The number of specimens of hairs and scales examined for the diagnosis of ringworm was 2,170, and a positive result was obtained in 1,171. Medical Officers of Health and practitioners submitted 1,205, of which 610 were positive. The School Staff submitted 105, of which 68 were positive, and the Central Staff submitted 859, of which 492 were positive.

Thirty-seven children were sent to the laboratory for examination to determine whether treatment had been successful in completely eradicating the ringworm parasite. Thirty cases were found not to be cured.

**Anthrax.**—Eight specimens were examined from suspected cases of malignant pustule, and in 4 the result was positive.

The particulars of the positive cases were as follows:—

No. 1.—Male, aged 26, Woolsorter, pustule on forehead (Dewsbury).

No. 2.—Male, aged 52, Wool Worker, pustule on forehead (Heckmondwike).

No. 3.—Female, aged 18, Twister, pustule on back of neck (Batley).

No. 4.—Male, aged 40, Night Watchman, pustule on right forearm (Batley).

**Cerebro-Spinal Fever.**—Twenty-five specimens of cerebro-spinal fluid were examined for the presence of the meningococcus. In 4 the meningococcus was found, which confirmed the diagnosis of cerebro-spinal fever; in 1 the tubercle bacillus was found, which showed that the disease was tuberculous meningitis, and in 20 the result was negative.

Five swabs from the throats of persons who had been in contact with a case of cerebro-spinal fever were examined, with negative results.

**Water.**—Thirty samples of water were examined, of which 18 were found to be polluted.

**Ophthalmia Neonatorum.**—Two specimens of pus from the eyes of infants suffering from ophthalmia suspected to be of gonorrhœal origin, were examined, with negative result.

**Venereal Disease.**—The number of pathological examinations performed under the Public Health (Venereal Diseases) Regulations, 1916, was 2,760. Of these 962 were made on behalf of the County Boroughs of Halifax, Dewsbury, Wakefield and Barnsley.

At the request of practitioners 15 specimens were collected at the laboratory by the pathologist.

#### Nature of Test.

District.	Specimens examined for			Total.	Cost to Authority.		
	Spirochaetes	Gonococci.	Wassermann Reaction.				
					£	s.	d.
West Riding ... ..	17	616	1165	1798			
Halifax ... ..	4	8	303	315	108	3	0
Dewsbury ... ..	1	130	121	252	52	3	6
Wakefield ... ..	1	35	173	209	63	5	0
Barnsley ... ..	—	—	186	186	65	2	0
Totals ... ..	23	789	1948	2760	288	13	6

In addition to the above sums for Venereal Disease examinations, £94 12s. 0d. was received from the County Boroughs of Dewsbury, Huddersfield and Wakefield.



**Vaccines.**—Thirty-one vaccines (17 from specimens of pus, 11 from sputum, and 3 from urine) were prepared.

**Silicosis Scheme.**—Materials from 2 post-mortem examinations were submitted from suspected cases of silicosis, and the lungs were examined microscopically. In 1 case the lungs showed evidence of early silicosis, and in the other there was cancer of the lung but no evidence of silicosis.

**Cytological Examinations.**—One hundred and eleven blood examinations were made, including examination of blood films and estimation of number of white cells, red cells and hæmoglobin.

**Post-Mortems and Inquests.**—The following examinations were made by Dr. Sutherland at the request of West Riding Coroners:—

- No. 1. Girl aged 19—Sudden death, fluid examined. Cause of death, “Pleurisy” (Wakefield).
- No. 2. Woman aged 43—Suspected criminal abortion; post-mortem examination made, abortion confirmed. Cause of death, “Pneumonia following abortion.” Material examined and evidence given at inquest (Halifax).
- No. 3. Boy aged 16—Suspected food poisoning; material examined; no evidence of food poisoning. Cause of death, “Septicæmia” (Skipton).
- No. 4. Woman aged 40—Suspected criminal abortion; post-mortem examination made, material examined. Cause of death, “Septic Peritonitis following abortion”; evidence given at the inquest (Wakefield).
- No. 5. Woman aged 36—Suspected criminal abortion; post-mortem examination made, material examined. Cause of death, “Peritonitis following abortion.” Evidence given at the inquest (Wakefield).
- No. 6. Boy aged 4½—Suspected food poisoning; material examined. No evidence of food poisoning found. Cause of death, “Streptococcal septicæmia” (Halifax).
- No. 7. Woman aged 40—Suspected food poisoning. Cause of death, “Cerebral Hæmorrhage” (Wakefield).
- No. 8. Male, aged 20—Sudden death. Post-mortem examination made and material examined. Cause of death, “Asphyxia.” Evidence given at inquest (Wakefield).
- No. 9. Male aged 55—Post-mortem examination made and material examined. Cause of death, “Fatty degeneration of the heart” (Wakefield).

No. 10. Male aged 59—Suspected food poisoning. Material examined. Cause of death, “Paratyphoid Fever” (Wakefield).

No. 11. Woman aged 40—Suspected food poisoning. Material and food examined. Cause of death, “Gastritis.” Evidence given at inquest (Wakefield).

No. 12. Boy aged 6—Died under anæsthetic. Cause of death, “Hodgkin’s Disease.” Evidence given at inquest (Wakefield).

**Examinations made for the West Riding Police.**—At the request of the Chief Constable, two specimens of clothing were examined in connection with a case of attempted rape, and Dr. Sutherland gave evidence at the local police court and at the Sessions.

**Tissue for Histological Examination.**—Fifty-seven specimens of tissue were examined histologically, chiefly to determine the presence or absence of cancer, and the results are given below:—

Source.	Num- ber ex- amined	Found Can- cerous.	Other Conditions.
Uterus ... ..	9	2	1 Tuberculosis 2 simple tumours
Breast ... ..	7	2	3 simple tumours
Glands ... ..	5	—	3 Tuberculosis 1 Hodgkin’s Disease
Ovary ... ..	5	1	2 simple tumours
Stomach ... ..	3	2	
Omentum ... ..	3	1	1 simple tumour
Kidney ... ..	3	2	
Intestine ... ..	3	2	
Nose ... ..	3		
Neck ... ..	2	1	
Skin ... ..	2	—	1 simple tumour
Lip ... ..	1	1	
Face ... ..	1	1	
Rectum ... ..	1	1	
Groin ... ..	1	1	
Vulva ... ..	1	1	
Gum ... ..	1	—	simple tumour
Other Sources (1 each):	6	—	
Eyelid, Jaw, Appen-			
dix, Cervix, Brain and			
Finger ... ..			



**Other Specimens.**—The remaining specimens included the following:—Urine for bacillus coli and other organisms, 244; swabs for organisms, 71; sputum for organisms other than tubercle bacilli, 53; pus for organisms, 17; fluids for organisms, 15; swabs for Vincent's Bacillus and Spirochaetes, 14; blood cultures for organisms, 7; faeces for organisms, 7; pleural fluid for organisms, 5; cerebro-spinal fluids for organisms, 5; faeces for worms, 3; faeces for occult blood, 8; tapeworms, 2; small intestine, 1; urine for lead, 1; urine for bilharzia, 1; blood for jaundice, 1; scrapings from an infant's tongue, 1; and 1 stomach.

LIST OF SANITARY DISTRICTS IN THE WEST RIDING SHOWING THE  
NUMBER OF SPECIMENS RECEIVED FROM EACH DURING 1923.

<i>Urban Districts.</i>	<i>Urban Districts.</i>	<i>Urban Districts.</i>
Adwick-le-Street ...126	Hunsworth ... .. —	Swinton ... .. 18
Altofts ... .. 40	Ilkley ... .. 130	Thurlstone ... .. 10
Ardley, East and	Keighley B. ... .. 172	Thurnseoe ... .. 16
West ... .. 37	Kirkburton ... .. 11	Thurstonland ... .. —
Baildon ... .. 8	Kirkheaton ... .. 12	Tiekhill ... .. —
Barkisland ... .. 1	Knaresborough ... .. 13	Todmorden B. ...127
Barnoldswick ... .. 64	Knottingley ... .. 35	Wath-upon-Dearne 30
Batley B. ... .. 113	Lepton ... .. 16	Whitley Upper ... .. —
Bentley-with-Arksey 88	Linthwaite ... .. 5	Whitwood ... .. 1
Bingley ... .. 260	Luddendenfoot ... .. 6	Wombwell ... .. 53
Birkenshaw ... .. 2	Marsden ... .. 21	Worsborough ... .. 8
Birstall ... .. 22	Meltham ... .. 35	Yeadon ... .. 8
Bolton-upon-Dearne 75	Methley ... .. 15	
Brighouse B. ... .. 56	Mexborough ...146	
Burley-in-Wharfe-	Midgley ... .. —	<i>Rural Districts.</i>
dale ... .. 7	Mirfield ... .. 90	Barnsley ... .. 109
Calverley ... .. 48	Morley B. ... .. 110	Bishopthorpe ... .. 2
Castleford ... .. 110	Mytholmroyd ... .. 6	Bowland ... .. 1
Clayton ... .. 17	New Mill ... .. 25	Doncaster ... .. 99
Clayton West ... .. 8	Normanton ... .. 134	Goole ... .. 9
Conisborough ... .. 15	Oakworth ... .. 2	Great Ouseburn ... 59
Cudworth ... .. 40	Ossett B. ... .. 136	Halifax ... .. 2
Darfield ... .. 10	Otley ... .. 83	Hemsworth ... .. 156
Darton ... .. 12	Oxenhope ... .. 1	Hunslet ... .. 9
Denby and	Penistone ... .. 37	Keighley ... .. —
Cumberworth ... .. 7	Pontefract B. ...143	Kiveton Park ... .. 64
Denholme ... .. 4	Pudsey B. ... .. 11	Knaresborough ... .. 2
Dodworth ... .. 7	Queensbury ... .. 34	Pateley Bridge ... .. 16
Doncaster B. ...805	Rawdon ... .. 56	Penistone ... .. 2
Drighlington ... .. 10	Rawmarsh ... .. 28	Pontefract ... .. 21
Earby ... .. 9	Ripon C. ... .. 35	Ripon ... .. 4
Elland ... .. 77	Rishworth ... .. 1	Rotherham ... .. 169
Emley ... .. 1	Rothwell ... .. 16	Sedbergh ... .. 2
Farnley Tyas ... .. —	Royston ... .. 4	Selby ... .. —
Farsley ... .. 8	Saddleworth ... .. 35	Settle ... .. 74
Featherstone ... .. 81	Scammonden ... .. —	Skipton ... .. 20
Flockton ... .. 3	Selby ... .. 63	Tadcaster ... .. 73
Garforth ... .. 14	Shelf ... .. 1	Thorne ... .. 56
Gildersome ... .. 7	Shelley ... .. 6	Todmorden ... .. 2
Golear ... .. 15	Shepley ... .. 8	Wakefield ... .. 74
Goole ... .. 61	Shipley ... .. 94	Wetherby ... .. 989
Greasbrough ... .. —	Silsden ... .. 3	Wharfedale N. ... .. 11
Greetland ... .. 22	Skelmanthorpe ... .. 13	Wharfedale S. ... .. 4
Guiseley ... .. 44	Skipton ... .. 108	Wortley ... .. 67
Gunthwaite and	Slaithwaite ... .. 8	Dewsbury C.B. ... .. 11
Ingbirehworth ... .. —	South Crosland ... .. —	Huddersfield C.B. ... 1
Harrogate B. ...141	Southowram ... .. 3	Wakefield C.B. ...914
Haworth ... .. 22	Sowerby ... .. —	<i>Hospitals, &amp;c.</i> 6958
Hebden Bridge ... .. 66	Sowerby Bridge ...181	<i>School Medical</i>
Heekmondwike ... .. 35	Soyland ... .. 1	<i>Inspectors</i> 127
Hemsworth ... .. 109	Spenborough—	<i>Central Staff</i> 863
Hipperholme ... .. 32	Cleekheaton ... .. 88	<i>Veneral Specimens</i> 2760
Holme ... .. —	Gomersal ... .. 8	
Holmfirth ... .. 44	Liversedge ... .. 192	
Honley ... .. 2	Springhead ... .. 3	Total No. of Speci-
Horbury ... .. 49	Stainland-with-Old	mens examined
Horsforth ... .. 83	Lindley ... .. 7	bacteriologically 19396
Hoyland Nether ... .. 57	Stanley ... .. 20	
Hoylandswaine ... .. —	Stoeksbridge ... .. 12	



## PART III.

### MATERNITY AND CHILD WELFARE.

#### Midwifery.

During 1923 few changes of any significance have taken place in the work of Maternity and Child Welfare.

The supervision of midwives is carried on as before.

Investigations have been made into the circumstances of every case of puerperal sepsis occurring in the practice of midwives. Co-operation with the West Riding Police and the West Riding Coroners has resulted in the Inspectors of Midwives being present at inquests where a midwife has been in attendance and her behaviour is being called in question. This has been done at my request and has enabled my Inspectors to hear, in the interest of the midwife involved, the evidence given at the enquiry.

In addition to the medical practitioner, the midwife clearly is the pivot of our midwifery service, seeing that she is taking an increasing share in attendance on parturient women. In some places she takes nearly 90% of the midwifery cases. Her efficiency should be the highest and her status should be improved. Any intimate knowledge of the personnel of the calling must at once show that it does not attract as many women with a good general education as it should. It contains many excellent women whose reliability, trustworthiness, and intelligence could not easily be matched, but the status of the whole is impaired by the quality of its weakest members.

The ideal qualification would be a good general education, a three years' general training, and an intensive course in midwifery, i.e., a training exactly similar to that which is required of candidates for health visitors. It must be regretfully admitted that such higher qualifications would increase the cost of the service. Not improbably the change of name from "midwife" to "obstetric nurse" would help to raise her status and general appreciation.

For the present we must be restricted to making the best of the material to hand, and for that purpose the duties of the Supervising Authority should be extended. It should no longer be confined to supervision in the police sense of the word—such as scrutinising records, examining midwifery bags, etc.—but should include instruction. For example, it is almost generally agreed that the lessening of the maternal mortality in childbirth, the neo-natal mortality in the first three months, but particularly in the first month of life, will be attained by the spread of ante-natal work.

Sound views on breast feeding receive lip service from all, but it is very much to be doubted whether breast feeding generally receives any more than that, and whether the midwife is able to give practical advice in this in cases where difficulties occur. It is possible she does not know. It should be the duty of the Supervising Authority to provide and disseminate the information.

Recent discussions among medical men and women of maternal mortality have revealed a considerable measure of agreement among those whose work is mainly concerned with obstetrics and gynaecology, among which the most important are the following:—

(1) The importance of ante-natal supervision in preventing abnormalities of parturition.

(2) The importance of the well-trained midwife and its corollary—the weakness of the service through the undertrained and inexperienced midwife.

(3) The need of cordial co-operation between doctor and midwife.

(4) High standard of aseptic care and personal cleanliness on the part of attendants, and provision of sterilised equipment.

(5) The midwives' role in reducing maternal and infant mortality.

(6) The value of breast feeding both for the mother and infant.

(7) Use and abuse of drugs.

(8) Handy women, if they cannot be abolished, should be compelled to register and should be under supervision.

The views of conferences such as these should be disseminated among the midwives and could best be done if the Supervising Authority combined regular instruction by lectures with the ordinary supervision duties. At present instruction is fortuitous and individual. The County Medical Officer's annual letter to midwives is more hortatory than didactic, and is perhaps not read, for some of the recipients are by their own confession "poor scholars."

Any development which gives the midwife a better status is likely to improve the service, and there is little doubt that some advance in the way of instruction would tend to this result.

In a previous report it was pointed out that the younger women trained by means of a scholarship served the County for a time and then left to go into a general hospital to get a three years' certificate of general training. It has at times been suggested that these should be lured back by giving them some share of the work of health visiting.



The following Table for the years 1917-1923 shows how the Maternal Mortality rate of the West Riding compares with that of England and Wales:—

	1917	1918	1919	1920	1921	1922	1923
England and Wales	3.89	3.79	4.37	4.33	3.91	3.81	3.81
West Riding Administrative County	4.77	4.81	4.68	5.26	5.04	4.16	4.32

Why the Maternal Mortality in the West Riding is higher than that of England and Wales as a whole is not known, and the first step to accurate knowledge would be the carrying out of suggestion No. 15 of the Scottish Departmental Committee,—“Every death occurring within four weeks of termination of pregnancy should be fully investigated by a person designated by the Local Authority.” Without these data any conclusions can not pretend to be more than guesswork. This department is slowly accumulating such data.

Two reports have recently been published on the subject of Maternal Mortality, viz.: (1) “Maternal Mortality,” Dr. Janet Campbell (Reports on Public Health and Medical Subjects No. 25); (2) “Puerperal Morbidity and Mortality” (Report of the Scottish Departmental Committee).

Neither of these reports points dogmatically to the causes of high Maternal Mortality rate. The former concludes:—“Although no definite and specific causes for a high maternal mortality rate emerge from a review of the conditions in these industrial towns certain general causes which are likely to affect the mortality rate to a greater or less extent are common to most areas, and are therefore worthy of consideration.”

- (a) Quality of professional attendance.
- (b) Abortion and Miscarriage.
- (c) Rickets.
- (d) Employment of Women.
- (e) General Sanitation and Housing.

*The methods of prevention of Maternal Mortality.*—Owing to the complexity of the problem, action in several directions is necessary in order to effect a substantial reduction in the maternal mortality rate, and the suggestions are:—

(1) Improvement in the professional clinical attendance because the majority of avoidable deaths are due in the main to unsatisfactory midwifery practice. This advance is to be effected by:—

- (a) Special education of the medical practitioner whilst a medical student.
- (b) The training of the midwife.
- (c) Co-operation of the doctor and midwife.

(2) Action through the Public Health Authorities under existing powers.

Prevention of obstetric disasters by ante-natal supervision, the provision of maternity beds and the fuller use of the child welfare centres for maternity consultations.

(3) Social and educational measures under the provision of the Maternity and Child Welfare Act and the National Health Insurance Scheme.

The Report of the Scottish Departmental Committee recommends, among other matters:—

Establishment of ante-natal clinics where sufficient concentration of population justifies it.

Ante-natal departments at maternity hospitals should be fully organised, and improved teaching of medical student and midwife be essential part of training.

Payment of maternity benefit conditional on engaging certified midwife or medical practitioner twelve weeks before date of normal term of delivery.

Local Authorities or combination of Authorities should provide facilities for testing of urine through ante-natal clinics.

Local Authorities should extend the assistance given to midwives by guaranteeing a minimum income to those considered satisfactory and dependent for a livelihood on their profession.

Power to furnish on loan sterile outfit and equipment.

*Midwives Acts, 1902 and 1918.*—The County Council is the Local Supervising Authority under the Midwives Acts for the Administrative County.

The supervision is carried out by the County Medical Officer, his Assistants and two Inspectresses. Health Visitors make quarterly visits to the midwives and inspect their registers, books of forms and their bags. During the year, 1,056 visits of inspection were made. Six midwives were cautioned by the County Medical Officer for minor infringements of the Rules; one midwife was cautioned by the Committee, and one midwife was struck off the roll on the report of the Committee, while 5 midwives resigned on account of old age and infirmity, and 5 died.



The midwives who notified their intention to practise during 1922 numbered 580, classified as follows:—

Total No. of Midwives.	Trained.		Untrained or Bona-fide.
	Attached to District Nursing Associa- tions.	Independent.	
580	191	196	193
	387		

The cases of confinement attended by midwives during the past five years were recorded as follows:—

1919	1920	1921	1922	1923
13678	18540	17145	16098	15106

*Notification of sending for Medical Aid, etc.*—The number received from midwives during 1923 is shown in the following table in comparison with the figures for previous years:—

	1919	1920	1921	1922	1923
Notifications of sending for medical help	1821	2345	2592	2396	2661
„ of death of child ... ..	67	60	41	36	44
„ of death of mother ... ..	5	4	7	3	2
Number of inquests reported ... ..	21	20	21	16	25
Notifications of still-births ... ..	350	367	348	314	320
„ of puerperal fever ... ..	25	51	39	29	37
„ of discharge from infant's eyes	133	153	198	150	137
„ of other infectious cases	17	15	8	12	14
„ of laying out dead body	68	48	28	22	19
„ of liability to be a source of infection	27	41	37	34	34
„ of artificial feeding ... ..	89	118	87	131	97

The following table affords some indication of the principal causes for which midwives have sought the aid of medical practitioners during 1923:—

Adherent Placenta ... .. 103	Brought forward ...2155
Placenta Praevia ... .. 12	Transverse Presentation ... 25
Ruptured Perineum ... 431	Funis do. ... 26
Ante-partum Hæmorrhage 71	Face do. ... 17
Post-partum Hæmorrhage 62	Hand do. ... 5
Premature Birth ... .. 129	Foot do. ... 10
Premature Labour ... .. 25	Occipito Posterior do. ... 39
Dangerous Feebleness ... 155	Phimosis ... .. 6
Discharge from Infant's	Phlegmasia Alba Dolens
Eyes ... .. 137	(White Leg) ... .. 1
Abortion or Miscarriage ... 89	Rigid Os ... .. 12
Prolonged Labour ... .. 453	Mastitis ... .. 4
Obstructed Labour ... .. 114	Congenital Malformations:
Uterine Inertia ... .. 85	Spina Bifida (Tumour of
Still-Birth ... .. 57	Back) ... .. 8
Eclampsia (Convulsions) 4	Anencephalus (Without
Contracted Pelvis ... .. 28	Brain) ... .. 1
Convulsions (baby) ... 25	Hydrocephalus (Disten-
Albuminuria ... .. 17	tion of Skull) ... .. 2
Pemphigus (Skin Disease) 2	Oedema ... .. 3
Pyrexia (Fever) ... .. 68	Miscellaneous ... .. 347
Breech Presentation ... 52	
Undefined do. ... 36	Total ... .. 2661

Carried forward ...2155

*Still-Births.*—The table given below shows the number of still-births per 100 live births notified under the Notification of Births Acts in those districts where these Acts are administered by the County Council:—

Year.	No. of Live Births Notified.	No. of Still-Births Notified.	No. of Still-Births per 100 Notified Live Births.
1918	14,603	612	4·2
1919	15,809	662	4·2
1920	20,847	760	3·6
1921	19,766	668	3·4
1922	17,695	637	3·6
Average for five years, 1918-1922	17,744	668	3·8
1923	18,155	677	3·7



The following table shows the duration of pregnancy and sex of the 320 still-births notified by midwives:—

Duration of Pregnancy.	Number of Still-Births.		
	Males.	Females.	Total of Both Sexes.
6—7 months	24	8	32
7—8 „	39	55	94
8—9 „	31	31	62
9 „	71	61	132
Totals	165	155	320

The 132 still-born babies reaching full period are classified as follows:—

Macerated	...	...	...	...	52
Malformed	...	...	...	...	8
Breech Presentations	...	...	...	...	13
Complicated Head Presentations	...	...	...	...	13
Uncomplicated Head Presentations	...	...	...	...	38
Feet and other Presentations	...	...	...	...	5
Born before arrival of midwife	...	...	...	...	3
					<hr/> 132 <hr/>

*Subsidies to Midwives.*—During the year 11 midwives were in receipt of a subsidy, but on the instructions of the Committee the subsidies were allowed to expire.

*Training of Midwives.*—On the instructions of the Committee no scholarships for free training in midwifery were given.

*Doctors' Fees in Emergency Cases.*—The claims received amounted to £1,435 10s. 0d., made up as follows:—

	£	s.	d.	
411 cases	608	13	6	Whole fees recoverable.
222 „	366	0	6	Half „ „
218 „	362	18	0	No „ „
88 „	97	18	0	Written off by Committee.
<hr/> 939 „ <hr/>	<hr/> 1435 <hr/>	<hr/> 10 <hr/>	<hr/> 0 <hr/>	

Of this total the sum of £791 13s. 9d. is recoverable, leaving the sum of £643 16s. 3d. expended by the County Council towards relief in necessitous cases.

Legal proceedings in 22 cases were ordered by the Committee, involving the sum of £29 11s. 6d.

*Midwives' Fees—Necessitous Cases.*—Under the County Council's Scheme for contributing to the payment of midwifery fees in necessitous cases, 197 claims were received, and the sum of £113 2s. 0d. was paid to midwives during the year.

*Artificial Feeding of Infants.*—Where a mother signifies her intention of feeding her baby artificially, the midwife notifies the County Medical Officer, and the following table gives the chief causes for the adoption of artificial feeding:—

Phthisis of mother	...	...	...	...	3
To return to work (illegitimate babies 90%)					12
On doctor's orders	...	...	...	...	5
Mastitis	...	...	...	...	4
Infant to be adopted	...	...	...	...	3
Death of mother	...	...	...	...	1
Cleft palate and hare lip	...	...	...	...	3
Twins	...	...	...	...	2
Refusal of mother	...	...	...	...	10
Agalactia	...	...	...	...	23
Miscellaneous, i.e. (retracted nipples; no milk or insufficiency; anæmia; and illness of mother)	...	...	...	...	31
					<hr/> 97 <hr/>

*Ophthalmia Neonatorum.*—The Child Welfare Sub-Committee on 6th December, 1922, sanctioned a small expenditure on "Collosol Argentum Liquidum" to cover the issue to a certain number of midwives. This was supplied to 224 midwives practising in 35 Sanitary Districts where the total cases notified during the 3 years, 1919-1921, exceeded five in each district. This area was used for the experiment, and the whole County taken for a control.

The cases of ophthalmia neonatorum reported in the County for the past five years have been as follows:—

1919	1920	1921	1922	1923
216	254	247	198	150

The cases were at their highest in 1920, and had begun to fall in 1921. The fall for the whole County was continued to 1923.

The experimental area showed a fall of 163 to 100, which when plotted against that of the whole County is considerably steeper than the latter.

This drug has now been issued to all the registered midwives in the County.



A scheme was introduced in the beginning of 1923 for a report on the termination of every case of ophthalmia neonatorum reported in the County, but as several Authorities who exercise powers under the Notification of Births Acts do not co-operate, it is not possible to give the termination of every case.

The following table shows the results of reports already received:—

Affected in both eyes		...	...	...	102
Affected in one eye		...	...	...	8
					<hr/> 110 <hr/>
		Clear.	Slight.	Opacity.	Blind.
Right eye	...	102	1	2	—
Left eye	...	102	1	3	1
Cases reported		...	...	...	110
Died (other causes)		...	...	...	5
Left County Council's area		...	...	...	1
Outstanding		...	...	...	5
Autonomous areas—outstanding		...	...	...	29
					<hr/> 150 <hr/>

In the practice of midwives there were reported 1 case "slight," 2 cases "opacity," and 1 case "blind." Strict and searching investigations were made into these cases, but no blame could be attached to the midwives concerned. Unfortunately all these cases occurred in the autonomous areas, where the County Council has no powers under the Notification of Births Acts, as previously mentioned.

*Areas inadequately supplied with Midwives.*—During 1923, further progress was made with our scheme for the establishment of an adequate midwifery service for the Riding, and eight new districts were organised and seven of these affiliated to the West Riding Nursing Association.

Three of these Associations, Denby and Cumberworth, Micklefield (Tadcaster Rural) and Middlestown (Wakefield Rural) perform, in addition to district nursing and midwifery, the work of health visiting and school nursing on behalf of the County Council.

There are now 78 Nursing Associations affiliated to the West Riding County Nursing Association, employing 94 Nurses, of whom:—

41 were Queen's Nurses.

13 were trained by the County Nursing Association.

40 obtained in other ways.

40 of these Nurses are performing the combined duties of District Nursing, Midwifery, Health Visiting and School Nursing.

40 Nurses are performing Sick Nursing and Midwifery only.  
 14 Nurses are performing Sick Nursing only.

The nurses attended 2,161 midwifery and maternity cases and have paid—

22057 Midwifery and maternity visits.  
 4910 Pre-natal visits.  
 22591 Infant health visits.  
 3636 School visits.

These figures show an increase over 1922 of 301 midwifery cases.

A sum of £297, being a grant made by the Ministry of Health in aid of the midwifery and maternity nursing services provided during the year 1923-24 by District Nursing Associations not affiliated to the County Nursing Association, was distributed among some 23 such Associations.

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### **Maternity and Child Welfare Centres.**

During the year only one new centre was opened, and this was at Edlington, in the Doncaster Rural District. A number of requests from various districts asking for centres were received and could not be acceded to, but the petitioners were encouraged to begin voluntary centres with which to demonstrate the need for and the appreciation of these adjuncts to child welfare work.

The work of the centres is specially appreciated by the mothers of first babies and it is encouraging to note, now that they have been in existence some years, how often a mother who came with her first baby has come again with the second, and subsequent babies. Some of the centres, I learn from private information, are acquiring considerable repute on account of the success which has attended the medical officer's efforts. If the moral is not too obvious to be pointed out, it is this—that a diligent and painstaking effort to find what is preventing a baby from thriving and the successful attempt to point out the obstacle and indicate a better way, has a punctual and immediate reward.

The success of the centres owes a good deal to the versatility of the nurses. They organise the social side of the work so that every month some activity of this nature is recorded, and in reading the monthly reports one cannot but be struck by the volume of work they achieve. Though the social activities—garden parties, excursions, etc.—are a by-product or subsidiary of their main duties, they indicate a good deal of effort put forth.

An increasing amount of collective teaching is done by medical officers and nurses. At one centre which I visited when in session, I was called upon for this purpose, because, as the voluntary committee insisted, the mothers expected it, and would be disappointed without some address.



The titles of some of the addresses, taken at random, will show their scope:—Diarrhœa, Prevention of Consumption, Flies, Hygiene of the Home, and Formation of Healthy Habits. There is an almost constant demand for lecturers. This activity reached its zenith in Health Week, when the official and voluntary staff of almost every centre conspired to make it impossible not to give some thought during the week to the subject of health and of healthy babies in particular. I was not able to visit more than a few of the Centres, but I may mention one where the Health Visitor had, by her persuasiveness, lured on to the platform a local Councillor and two lecturers from a neighbouring University.

At those places where the Infantile Mortality is high—100 or near it—the two Inspectresses have given lantern lectures on the subject of infant rearing; this was done with the hearty co-operation of local Child Welfare Committees, which bore the cost of hire of the rooms and gave assistance in securing a lanternist. The lectures were well attended and requests came in for the lecture from other places, not on the scheme as originally planned.

Places with high Infant Mortality are enumerated in another part of the report.

As a result of certain recommendations of the Economy Committee appointed by the County Council, the Child Welfare Committee appointed a Special Sub-Committee to consider and, if desirable, prepare a scheme for the recovery from persons receiving treatment, or the parents of such persons, of the cost of such treatment, and the following report was approved and adopted.

That no charge be made for advice given at Child Welfare Centres; and

That no charge be made for dressings applied at Child Welfare Centres.

The Sub-Committee considered the desirability of having fixed at the various Centres boxes in which voluntary contributions could be placed, but, having regard to the amount likely to be received from this source, they recommend—

That boxes for voluntary contributions be not placed in the Centres.

It was resolved that in view of the satisfactory results obtained no change be made in the present system for the distribution of dried milk, virol, etc.

At the end of the year the Child Welfare Sub-Committee considered the need for further centres in the Riding and recommended that ten more be established at Elland, Holmfirth and Otley Urban Districts, Birdwell (Worsborough Urban District),

Catcliffe (Rotherham Rural District), Crigglestone (Wakefield Rural District), Rossington (Doncaster Rural District), Stainforth (Thorne Rural District), and take over the existing Voluntary Centres at Carcroft (Adwick-le-Street Urban District), and Halton (Hunslet Rural District).

During the year additional accommodation was provided at the Knaresborough Centre, and we are now using four rooms in the premises at Park Square Chambers.

Owing to the increased attendances of mothers and infants at the Mirfield Centre, the Committee found it necessary to rent two further rooms at Ings Grove. The same remark also applies to the Dodworth Centre, where it was found necessary to remove from the Council Offices to more commodious rooms at the Mechanics' Institute.

Internal renovations were carried out at the Knaresborough, Normanton and Skipton Centres.

The following Medical Officers of Centres resigned during the year:—

Dr. R. B. Eskrigge, Royston—Desirous of giving up work.

Dr. C. C. Moxon, Glasshoughton—Failing health.

Dr. W. Hirst, Knottingley—Failing health.

Dr. H. A. Moore, Rawmarsh—One year's term of office expired.

and the undermentioned medical practitioners were appointed to fill the vacancies:—

Dr. H. B. Pare, Royston.

Dr. W. Kemp, Glasshoughton.

Dr. J. M. Norman, Knottingley.

Dr. M. C. Naylor, Rawmarsh.

These appointments were made in consultation with the West Riding Medical and Panel Committee.

Our Health Visitor for Pontefract Borough assists at the Pontefract Barracks Infant Clinic, which is held fortnightly, and for these services the Army Authorities pay an acknowledgment of 5/- per session. The average attendance is about 15 per session.

During the year, all the County Council's Centres were affiliated to the National League for Health, Maternity and Child Welfare, and thus were able to participate in any competitions promoted by the League, and receive their literature. The Chairman of the Child Welfare Committee (Archdeacon Phipps) and the County Medical Officer were appointed the representatives of the County Council on the Council of the National League.



*Activities at the Child Welfare Centres.*—Realising that this work of saving infant life is likely to achieve its maximum success as a form of co-operation, the formation of strong voluntary committees is encouraged at every centre. This is work requiring extreme tact. The first essential is the right type of nurse who can invite representatives of all interests, all grades, and all denominations, and mould them into an orderly and enthusiastic team. With such a team, each member doing the allotted task and having the responsibility for some definite duty when necessary, the success of a centre is assured. An example of the value of a strong voluntary committee may be given. A town with a reputation for overcrowding and old, insanitary property, together with a high infantile mortality, had a child welfare centre at which the average attendance for any period seldom reached twenty, although there were 400 births per annum. Such a condition was a despair to everyone who contemplated it. Successive nurses had pronounced with confident finality that it was impossible to get a voluntary committee together, that the people were apathetic and indifferent, “and as things have been—they remain.” Various expedients had been considered—even to carrying on an “evangelical mission” into the poorer districts. Before that was done a representative public meeting was called and was addressed by one of the Inspectresses. In consequence some interest was aroused, a new nurse gathered round her a strong committee, and the attendances now sometimes reach 70 per session.

The local voluntary centres are encouraged to make any innovation which their ingenuity suggests, and these are as far as possible adopted. One centre has a committee of mothers, whose duty is to welcome newcomers, so that no one shall feel lonely or isolated. This might seem a trivial matter, but it is known that mothers have made one visit, and one only, because they had not been spoken to by anyone and had subsequently applied to the health visitor to supervise her baby's growth and advise her if necessary. One of the nicest innovations is for one member of the voluntary committee to act as “hostess.”

*Municipal Centres and Clinics.*—The following table gives a list of maternity and child welfare centres open in the Riding, showing the number of sessions held, day and time of meeting, average attendance per session, and the arrangements made for medical supervision:—

Name and Address.	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session.		Present arrangements for medical supervision
			Exp. Mos.	Children.	
1. ADWICK-LE-STREET, Wesleyan Chapel, Woodlands	Weekly	Thurs. 2—4	—	38	Whole-time M.O.H.
2. ALLERTON BYWATER (TADCASTER R.D.), Army Hut, adjoining Parish Room	Do.	Mon. 2—4	1	18	Part-time Medical
3. ASKERN (DONCASTER R.D.), Wesleyan Sunday School	Do.	Tues. 2—4	—	22	Do.
4. BAILDON, Glen Aire Cafe	Do.	Wed. 2—4	—	14	Do.
5. BENTLEY, Wesleyan Sunday School	Do.	Wed. 2—4	—	41	Whole-time M.O.H.
6. BOROUGHBIDGE (GREAT OUSEBURN R.D.), Wesleyan Sunday School	Fortnightly	Mon. 2—4	—	18	School M.
7. CHAPELTOWN (WORTLEY R.D.), Wesleyan Sunday School	Weekly	Tues. 2—4	4	27	Whole-time M.O.H.
8. CLAYTON, Council School	Fortnightly	Thurs. 2—4	2	9	School M.
9. CONISBOROUGH, Army Hut, Balby Street Council School	Weekly	Thurs. 2—4	1	19	Do.
10. CUDWORTH, St. George's Hall	Do.	Wed. 2—4	—	22	Part-time Medical
11. DALTON (ROTHERHAM R.D.), Primitive Methodist Chapel	Do.	Wed. 2—4	—	20	Do.
12. DARTON, Wesleyan Sunday School, Staincross	Do.	Thurs. 2—4	1	20	Do.
13. DARTON, Adult School, Gawber	Do.	Tues. 2—4	3	20	Do.
14. DARFIELD, Wesleyan Sunday School	Do.	Tues. 2—4	4	18	Do.
15. DINNINGTON (KIVETON PARK R.D.), Wesleyan Sunday School	Do.	Tues. 2—4	7	16	Do.
16. DODWORTH, Mechanics' Institute	Do.	Tues. 2—4	4	24	Do.
17. EAST ARDSLEY (ARDSLEY E. & W.), Primitive Methodist Chapel	Do.	Tues. 2—4	1	15	Do.



Name and Address.	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session.		Present arrangements for medical supervision.
			Exp. Mos.	Children.	
WIDECROFT (WORTLEY R.D.), Memorial Hall	Weekly	Wed. 2—4	2	11	Whole-time M.O.H.
WIDELINGTON (DONCASTER R.D.), Primitive Methodist Chapel	Do.	Tues. 2—4	1	34	Do.
WIDMARSH, United Methodist Church	Do.	Tues. 2—4	—	24	Part-time Medical man
WIDFORTH, St. Mary's Hall	Do.	Mon. 2—4	—	40	Do.
WIDSHOUGHTON (PONTEFRACT R.D.), St. Paul's Institute	Do.	Mon. 2—4	—	38	Do.
WIDWORTH, Council School	Fortnightly	Wed. 2—4	—	27	School M.I.
WIDEBEN BRIDGE, Old Secondary School	Weekly	Tues. 2—4	—	23	Do.
WIDBURY, Primitive Methodist School	Do.	Mon. 2—4	—	31	Part-time Medical man
WIDFORTH, Mechanics' Institute	Do.	Wed. 2—4	5	33	Do.
WIDLAND, Knowle Memorial Church	Do.	Tues. 2—4	—	43	Do.
WIDKIRK, Council School	Do.	Tues. 2—4	—	27	Do.
WIDNABOROUGH, Park Square Chambers	Do.	Tues. 2—4	—	37	School M.I.
WIDNOTTINGLEY, Secondary School	Do.	Mon. 2—4	—	28	Part-time Medical man
WIDNANTON, Park Pavilion	Do.	Tues. 2—4	3	26	School M.I.
WIDULTON (HUNSLET R.D.), Village Institute	Do.	Tues. 2—4	2	13	Part-time Medical man
WIDWOOD (STANLEY U.D.), Church Institute	Do.	Mon. 2—4	—	28	Do.
WIDNISTONE, Wesleyan Sunday School	Do.	Tues. 2—4	2	47	Do.
WIDTEFRACT BORO., Tuberculosis Dispensary, The Lindens, Tanshelf	Do.	Mon. 2—4	—	19	Do.
WIDENSBURY, Council Offices.	Do.	Tues. 2—4	1	8	Do.
WIDMARSH, Spiritual Temple, Parkgate	Do.	Tues. 2—4	—	14	Do.

Name and Address.	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session.		Present arrangements for medical supervision.
			Exp. Mos.	Children.	
38. RIPON, Drill Hall	Weekly	Mon. 2—4	—	38	School M
39. ROYSTON, Wesleyan Sunday School	Do.	Wed. 2—4	—	37	Part-time Medical r
40. SELBY, Museum Hall	Do.	Fri. 2—4	—	28	Whole-tir M.O.H.
41. SHARLSTON (WAKEFIELD R. D.), St. Luke's Hall	Do.	Tues. 2—4	—	20	Part-time Medical r
42. SILSDEN, Ambulance Station	Fortnightly	Tues. 2—4	—	28	School M
43. SKIPTON, Commercial House, High Street	Weekly	Wed. 2—4	—	19	Do.
44. SLAITHWAITE, Cookery Centre	Do.	Fri. 2—4	7	13	Do.
45. STOCKSBRIDGE, Wesleyan Sunday School	Do.	Tues. 2—4	1	18	Part-time Medical n
46. SWINTON, Carnegie Free Library	Do.	Tues. 2—4	—	31	Do.
47. TADCASTER (TADCASTER R.D.), Westgate House	Fortnightly	Tues. 2—4	—	20	School M
48. THORNE (THORNE R.D.), Temperance Institute	Weekly	Wed. 2—4	—	20	Part-time Medical n
49. THURNSCOE, Church Sunday School	Do.	Mon. 2—4	1	33	Do.
50. WALES (KIVETON PARK R.D.), St. John's Rooms	Do.	Wed. 2—4	—	20	Do.
51. WATH-ON-DEARNE, Wesleyan Sunday School	Do.	Mon. 2—4	—	60	Do.
52. WEST ARDSLEY (ARDSLEY E. & W.)	Do.	Mon. 2—4	1	17	Do.
53. WETHERBY (WETHERBY R.D.), Primitive Methodist School	Fortnightly	Thurs. 2—4	—	24	Do.
54. WORSBOROUGH, Primitive Methodist School	Weekly	Tues. 2—4	5	13	Do.



## Voluntary Infant Welfare Centres.

Name and Address.	Whether Sessions are held weekly, fortnightly, etc.	Day and time of Meeting.	Av. Attendance per Session.		Present arrangements for medical supervision.
			Exp. Mos.	Children.	
BAWTRY (DONCASTER R.D.), Church Hall	Weekly	Mon. 2—4	1	9	Part-time Medical man
CARCROFT (ADWICK-le-STREET U.D.), Mission Hall	Do.	Tues. 2—4	—	18	Whole-time M.O.H. attends once monthly
FOREDALE (SETTLE R.D.)	Monthly	Wed. 2—4	—	10	Part-time Medical man
GLUSBURN (SKIPTON R.D.), Village Institute	Fortnightly	Tues. 2—4	4	21	School M.I.
HALTON (HUNSLET R.D.), Wesleyan Sunday School	Do.	Wed. 2—4	—	40	Part-time Medical man
HORTON (Settle R.D.)	Monthly	Wed. 2—4	1	10	Do.
METHLEY, Mickletown Institute	Weekly	Mon. 2—4	4	13	Do.
SETTLE (SETTLE R.D.), Ribblesdale Terrace	Do.	Thurs. 2—4	—	13	Do.
STANLEY, Grove Council School	Monthly	Wed. 2—4	—	26	Nil
STANLEY, Lane End Council School	Do.	Wed. 2—4	—	23	Do.
STANLEY, Wrenthorpe Council School	Do.	Tues. 2—4	—	25	Do.

*Notification of Births Acts.*—During the year 19,682 births were registered in the County Notification of Births area, and 18,155 live births were notified.

Of the 18,155 births, 10,387 were notified by midwives, and 8,445 by doctors and parents.

The numbers notified by doctors and parents vary very little when compared with those for the year 1922, but there is an appreciable increase in the number of births notified by midwives, i.e., 10,387 in 1923, against 9,817 in 1922, which is an indication that our effort to provide an efficient midwifery and maternity nursing service throughout the County is bearing fruit.

In July, a communication was received from the Clerk to the Hemsworth Urban District Council requesting that the Urban District be included in the County Council's scheme for

Maternity and Child Welfare, and it was decided to make application to the Ministry of Health for the County Council to be made the Authority for the purposes of the Notification of Births Act, 1907, in this district.

The application was approved by the Ministry, and the Hemsworth Urban District came into the County scheme on the 1st January, 1924.

In consequence of the transference of the powers under the Notification of Births Act from the Hemsworth Urban District an additional Health Visitor was appointed, and we were thus able to make a re-arrangement of the nursing areas in this district and relieve considerably the areas of four other nurses in this mining locality.

*Home Visits.*—Visits paid by Health Visitors during the year were as follows (for full details, see Table IV in Appendix) :—

To expectant mothers	...	...	...	9,372
To infants under 1	...	...	...	174,571
To children 1-5	...	...	...	37,744
Special Visits (Ophthalmia Neonatorum, Teething, Feeding, Circumcision, etc.)				4,055
Measles cases	...	...	...	4,136

With the increased duties imposed on nurses by the establishment of Child Welfare Centres and School Clinics and with no corresponding increase in the health visiting staff, the home visitation has suffered in consequence, but it is hoped with a return to more normal conditions to re-arrange some of the nursing areas in the South Yorkshire Coalfield (which is growing very rapidly) and appoint additional nurses and thus allow the nurses to be on the district more frequently.

*Measles.*—During 1923 the Health Visitors paid 4,136 visits to Measles cases, this number being distributed over some 59 sanitary districts (see Table IV in Appendix). The districts mainly affected were: Altofts, Darton, Hoyland Nether, Kirkheaton, Lepton, Selby and Whitley Upper Urban Districts and the Doncaster, Tadcaster, Wakefield and Wetherby Rural Districts. A rather severe epidemic occurred in the Colne and Holme Valleys, but its spread to other districts was averted by the prompt closure of schools and the drafting of additional nurses into the area to assist in the home visitation. Literature was freely distributed, and the epidemic soon abated.

Immediately an outbreak occurs the services of the Health Visitor are offered, free of cost, to the local Medical Officer of Health, and invariably her services are accepted, and all her other work is then suspended until there are signs of the epidemic abating. Information as to the occurrence of measles is usually received first from the Education Department, who notify the closure of a school, and the nurse is immediately instructed



to visit the Head Teacher and obtain from him or her the names and addresses of all absentees prior to the school being closed, and in this way the nurse is put immediately in touch with infected households.

Measles is no longer notifiable, and reliable returns of incidence are not to be had. The disease tends to run in cycles. When an epidemic occurs it will affect the unprotected members of the community, and these (or as many of them as recover) will now be probably protected. Then there will be comparative freedom for a few years until another batch of new comers unprotected by previous attack becomes the victim of the next epidemic.

It is not likely that the visiting done by the Health Visitors will make any great difference to the incidence of the disease. The effect must be looked for elsewhere. The work of school medical inspection has shewn that several intractable conditions met with are due to, or at least date from, an attack of measles. There are corneal ulcers with recurring attacks of inflammation of the conjunctiva, intolerance of light and impairment of vision; otitis media, with purulent discharge from the ear and destruction of the mechanism of hearing, and a general debility and wasting often accompanied by attacks of bronchitis which is believed to be frequently due to tuberculous infection of the bronchial glands. These three conditions, each in its own way, form a large proportion of the long persisting defects treated in the School Clinics and (in the case of tuberculous infection of bronchial glands) in the Tuberculosis Dispensaries and Sanatoria for children.

The prevention of these serious sequelæ of measles depends on the recognition of its potential seriousness, and the seriousness once recognised on the adequate nursing treatment of each child with measles. This is the lesson which the Health Visitors are sent out to broadcast wherever there is an outbreak of measles. These efforts which have both a preventive and educational aim may confidently be expected to have widespread beneficial results.

*Maternity Homes.*—Much headway was made during the year to provide lying-in accommodation in various parts of the Riding, and at the end of the year the County Council had agreements with the following Municipal Authorities and Hospital Committees for the admission of West Riding patients:—

*Municipal Authorities*—Wakefield, Morley and York Corporations.

*Hospital Committees*—Holme Valley Memorial Hospital.

*Nursing Associations*—Heckmondwike.

As I reported last year, the need for lying-in accommodation in South Yorkshire is very pressing, and schemes have been mooted by District Councils around Rotherham and in the Dearne

Valley. Substantial grants were promised from the Miners' Welfare Fund, and the County Council have promised to assist by guaranteeing the fees of patients admitted if any schemes go forward to the Ministry of Health and are approved. The Ministry of Health do not favour the County Council establishing Maternity Homes in the Riding but are prepared to sanction the utilisation of existing accommodation. Negotiations are at present in progress to send County patients to the Jessop Hospital for Women, Sheffield, the Edenfield Maternity Home, Doncaster, and the Leeds Maternity Hospital. Arrangements have also been completed for the admission of patients to the Maternity Pavilion of the St. Luke's Hospital, Halifax, and an agreement as to terms of admission is now being drawn up.

The fees of the Homes vary from £2 7s. 0d. to £3 3s. 0d. per week, with the addition of the fees of a medical practitioner, if it is found necessary to call one in.

The following table shows the number of women admitted to Maternity Homes from the West Riding Notification of Births Area:—

Maternity Hospital or Home.	Patients Admitted.	Death of Mother.	Death of Infant.	Still- births.
Wakefield Municipal	31	1	—	1
Morley do.	7	—	—	2
York do.	14	—	1	—
Holme Valley Memorial Hospital	39	—	1	2
Nursing Home, Heckmondwike	—	—	—	—
Total	91	1	2	5

The death of mother was due to eclampsia six hours after admission, and the two deaths of infants were due to premature birth.

The County Council contributed a sum of £259 10s. 0d. in 1923 towards the fees of the Homes, of which the sum of £81 19s. 0d. is recoverable.

During the year the scale for the recovery of fees paid by the County Council for the maintenance of patients in Maternity Homes was revised and is now as under:—

In all cases a sum equivalent to the maternity benefit shall be paid, subject to the right of the Committee to refund the amount paid in special cases of necessity.

Where the net weekly income of the family, after deducting 5/- for each child under 14 years of age, does not exceed 30/-, the County Council shall not claim repayment of any of the fees other than the equivalent of the maternity benefit.



Where the net weekly income of the family, calculated as above, is over 30/-, but does not exceed 50/-, the County Council shall claim the repayment of one-half of such fees and in addition the equivalent of the maternity benefit.

Where the net weekly income of the family, calculated as above, exceeds 50/-, the repayment of the whole of such fees shall be claimed.

In ascertaining the weekly income of the family the average earnings of the four weeks preceding the birth shall be taken.

*Co-ordination with School Medical Services.*—Several Local Councils are the authority under the Notification of Births Acts, i.e., the Boroughs of Batley, Brighouse, Doncaster, Harrogate, Keighley, Morley, Ossett, Pudsey and Todmorden; the Urban Districts of Bingley, Bolton-on-Deane, Castleford, Featherstone, Goole, Heckmondwike, Ilkley, Mexborough, Rothwell, Shipley, Spenborough, Wombwell, and the Rural District of Hemsworth.

Arrangements made by the County Council in the interests of economy and to avoid overlapping are as follows:—

*Authorities performing School Nursing for County Council on agreed terms*—Bolton-on-Deane, Bingley, Rothwell and Wombwell Urban Districts.

*Districts where County Council employ whole-time School Nurses on account of large size of area*—Castleford, Featherstone, Goole, Mexborough, and Normanton Urban Districts, and Hemsworth Rural District.

In Heckmondwike, the work of school nursing is performed by the local Council's Nurse. At Ilkley, the County Council's Nurse does health visiting for the Ilkley authority.

At Bolton-on-Deane, Ilkley and Wombwell, the County Council's school clinic combines with the maternity and child welfare centres belonging to the Local Authority.

At Pontefract and Tadcaster, the child welfare centre and tuberculosis dispensary are housed in the same building, and this is largely experimental. The two sections are held in separate rooms, and special attention is paid to cleansing and disinfection.

*Health Visitors.*—In addition to two Lady Inspectors the Nursing Staff at the end of the year consisted of—

- 1 Emergency Nurse,
- 6 School Nurses,
- 88 Health Visitors and School Nurses (of whom 60 do tuberculosis visiting outside the six-mile radius of the tuberculosis dispensaries).
- 65 Part-time Nurses (one does tuberculosis visiting) employed by Nursing Associations.

During the year, 15 whole-time nurses were appointed and 13 whole-time nurses resigned and one died. The reasons for resignation are as follows:—

Marriage	...	...	...	...	...	2
Ill-health	...	...	...	...	...	5
Preference for actual nursing	...	...	...	...	...	3
Family reasons	...	...	...	...	...	2
Obtained similar post at home	...	...	...	...	...	1
						—
						13
						—

The Springhead Nursing Association gave up the health visiting and school nursing work in the Springhead Urban District, and a trained nurse practising midwifery in a neighbouring district was appointed to carry out the public health duties part-time.

The Bentham District Nursing Association (Settle Rural District) decided on account of financial difficulties to dispense with the services of two of their nurses, and in consequence gave up the health visiting and school nursing work in the Ingleton area.

By a re-arrangement of four whole-time nursing areas in the north of the Riding, it was found possible to add the work of the Ingleton area on to one of the whole-time areas.

The Luddenden and Midgley Nursing Association terminated their arrangement with the County Council whereby their nurse performed on our behalf the work of health visiting and school nursing in the Midgley Urban District, and the public health duties in this district were added to our whole-time nurse for the Sowerby and Mytholmroyd Urban Districts.

During the year, new Nursing Associations were formed at Denby and Cumberworth, Middlestown (Wakefield Rural District), and Micklefield (Tadcaster Rural District), and to assist them financially they asked to be allowed to undertake on behalf of the County Council the work of health visiting and school nursing, in addition to the midwifery and sick nursing work, and in each case the request was granted. In this way it was found possible to make a re-adjustment of several whole-time nursing districts, in which the areas were too extensive.

The Health Visitors do the work of health visiting, school nursing, attendance at child welfare centres and tuberculosis visiting (when the tuberculous patient lives more than six miles from a tuberculosis dispensary).

The arrangement with the Great Ouseburn Board of Guardians by which the Health Visitors in the Great Ouseburn Union visit boarded out children still continues.



*Inspectors of Nurses and Midwives.*—There are two Inspectors of Nurses and Midwives. The following is a summary of their work during the year:—

Visits paid to whole-time nurses	...	...	...	320
Visits paid to part-time nurses	...	...	...	95
Visits paid to midwives	...	...	...	480
Special Visits (ophthalmia neonatorum, puerperal fever, uncertified practice, concealment of birth, and abortifacients)	...	...	...	49
Attendances at conferences of nurses and with Nursing Associations	...	...	...	28
Interviews with medical practitioners and various people relative to the Maternity and Child Welfare scheme	...	...	...	52
Premises inspected as to their suitability for Child Welfare Centres	...	...	...	10

In addition to the above work the Inspectors made periodic visits to Child Welfare Centres (67) during session, gave lantern lectures to mothers at Centres (9), met local Child Welfare Committees re their duties at Centres (3); attendance at Penal Session of Central Midwives Board (1), instructed new nurses in their duties, and attended and gave addresses at clinic festivities. They also made special enquiries into the high infantile mortality rate and one of the Inspectors also spent a week on a special investigation into the cause of the large number of tuberculosis notifications in a colliery village.

*Supply of Milk to Mothers and Infants.*—The supply of milk is restricted to expectant mothers and to infants under three years of age, and only in exceptional cases are issues sanctioned for children between the ages of three and five.

Dried milk only is supplied, and during 1923 the issues of this commodity decreased further, due largely to our activities in the promotion of breast feeding. At some centres the sales have decreased by 50%. Although the milk is sold to mothers at cost price, even this has been beyond their means, with the result that breast feeding is now on the increase.

Owing to the fact that dried milk is sold so cheaply, applications for supplies free or at less than cost price are very few, and these are only sanctioned in exceptional cases.

During the year 2,330 cartons of dried milk were given free, and 180 cartons were sold at half price, at a total cost to the County of £222 2s. 4d.

A Special Sub-Committee review all applications for a supply of milk at less than cost price and authorise all issues.

The sale of any brand of dried milk at a centre does not mean that such a milk is officially recommended as the best possible means of feeding a baby. But where a mother fails to feed a baby at the breast, and the supply of cow's milk is not above suspicion, or she has no facilities for keeping it, then a dried milk is recommended. So few houses have adequate cool fly-proof pantries that the question of storage often turns the scale heavily in favour of dried milk. Dried milk keeps well, and only enough need be used for one feed. The emulsion made with water has the chemical composition of high grade milk. Its physical character is somewhat inferior in that the fat is not so thoroughly emulsified, and fat globules tend to run together on the surface. Bacteriologically it is good. Some anxiety has been felt lest it should be short of fat-soluble vitamin A, the absence of which is one of the factors in the production of rickets, but clinical observations focussed on this point have not shown any ill effects to result from its use.\*

The Medical Officers of Child Welfare Centres have been asked to pay special attention to any manifestations of "deficiency" phenomena in children fed on dried milk, but at the same time it must be remembered that when dried milks are suggested the accompaniment of fruit juice (grape, tomato and orange juice) and at the appropriate age butter or cod liver oil is urged in order to avoid the risk of deficiency from the dietary of the babies fed on some dried milk. By these precautions the babies run no risk of developing deficiency-diseases.

\*NOTE.—*Deficiency Diseases.*—If experimental animals are fed on chemically pure food synthetically prepared these foods even though containing an adequate and properly proportional amount of the various constituents of a diet with an adequate caloric value may wholly fail to support nutrition and growth in young animals. These animals fail to gain in weight, lose condition and become listless and apathetic. Such foods are lacking in some component in natural food materials which are instinctively consumed by men and animals.

These components of natural foods, the absence of which has results wholly disproportionate to the amount in which they are normally consumed, may be added to synthetically prepared foods, or returned to foods from which they have previously been abstracted, and the animals which failed to thrive on chemically pure foods will now put on weight and improve in condition. These necessary constituents of food are at least three in number, and two of them—the first found in milk, butter and cod liver oil, and the second found in fresh fruit juices—are of special importance to growing babies, as their absence leads to rickets and scurvy respectively. As there is yet no agreement as to how much of this first necessary constituent of food existing in fresh milk is present in dried milk it is advisable to add it to the diet of a baby fed on dried milk to meet the possibility of the dried milk being deficient in this respect.



**Infant Mortality: Deaths and Death Rates (per 1,000 Births)  
for 5 years, 1919-1923.**

While the Infantile Mortality in the last 9 months of the first year of life has been greatly diminished, the reduction has not been so marked in the first three months. The causes of death are for the most part prematurity, weakness and errors of development for which the remedy is greater ante-natal supervision. If the Infantile Mortality for the first month fell at the same rate as the Infantile Mortality for the twelve months the deaths per 1,000 should be 27 or 28.

YEAR.	DISTRICT.	Number of deaths at following ages:								Deaths per 1,000 Births.	
		Under 1 day.	1-7 days.	1-4 weeks.	4 weeks to 3 months.	3-6 months.	6-9 months.	9-12 months.	Total under 1 year.	Under 4 weeks.	Total under 1 year.
1919	Urban Districts .....	242	298	336	339	294	274	216	1999	44	100
	Rural       ,, .....	119	110	151	141	106	122	94	843	45	100
1920	Urban Districts .....	285	345	438	458	382	337	251	2496	40	93
	Rural       ,, .....	109	135	159	195	166	122	90	976	37	89
1921	Urban Districts .....	275	346	432	439	415	314	267	2488	41	97
	Rural       ,, .....	108	118	136	206	143	113	119	943	37	97
1922	Urban Districts .....	241	294	324	293	234	257	194	1837	38	81
	Rural       ,, .....	99	114	109	98	95	102	77	694	37	79
1923	Urban Districts .....	239	288	292	312	243	232	218	1824	37	82
	Rural       ,, .....	89	128	114	118	101	80	65	695	37	78

# PART IV.

## TREATMENT OF TUBERCULOSIS.

TABLE I.

Notifications received during 1923 under the Public Health (Tuberculosis) Regulations, 1912.

AGE PERIODS.	Primary Notifications on Form A.											Primary Notifications on Form B.			Form C. (Admissions)			
	TOTAL.											TOTAL.			Poor Law Institu- tions.	Sanatoria		
	$\frac{0}{1}$	$\frac{1}{5}$	$\frac{5}{10}$	$\frac{10}{15}$	$\frac{15}{20}$	$\frac{20}{25}$	$\frac{25}{35}$	$\frac{35}{45}$	$\frac{45}{55}$	$\frac{55}{65}$	$\frac{65}{\text{and over.}}$	$\frac{0}{5}$	$\frac{5}{10}$	$\frac{10}{15}$				
Pulmonary (Males)	3	29	129	101	120	119	220	170	93	44	16	1044	—	9	1	10	3	681
Do. (Females)	2	26	120	114	106	146	202	113	50	29	11	919	—	13	3	16	3	377
Non-Pulmonary (Males)	15	73	79	45	35	11	19	15	13	3	2	310	—	11	12	23	4	21
Do. (Females)	9	43	72	57	39	20	13	9	6	5	4	277	—	13	10	23	3	29



TABLE II.

**Mortality from Tuberculosis of the Respiratory System  
(Pulmonary Tuberculosis).**

Year.	West Riding Administrative County.						<i>England &amp; Wales Death-rate.</i>
	Total No. of Deaths.			Death-rate per 1,000 of the population.			
	County.	Urban.	Rural.	County.	Urban.	Rural.	
1913	1150	879	271	0.76	0.78	0.69	1.00
1914	1149	920	229	0.74	0.80	0.57	1.05
1915	1156	904	252	0.80	0.84	0.68	1.16
1916	1253	953	300	0.89	0.91	0.83	1.18
1917	1278	997	281	0.98	0.98	0.98	1.25
1918	1430	1102	328	1.06	1.10	0.94	1.34
1919	1178	932	246	0.82	0.88	0.66	1.00
1920†	1068	832	236	0.71	0.75	0.60	0.89
1921	1129	897	232	0.74	0.79	0.60	0.88
1922	1021	803	218	0.68	0.72	0.58	0.89
Average for 10 years, 1913-22)	1181	922	259	0.81	0.85	0.70	1.05
1923	1070	845	225	0.71	0.75	0.59	0.84

† For 1920 and subsequent years deaths from miliary tuberculosis, which were previously included under "pulmonary" tuberculosis, are now classified under "other forms of tuberculosis." This alteration is but slight, and the rates from 1920 are comparable with those for previous years.

The death rate from Pulmonary Tuberculosis in 1923 in the Administrative County was 0.71, compared with 0.68 for the previous year, but, as has been so often stated, a comparison of the individual annual rates for two or three years is by no means satisfactory for trustworthy deductions. For the ten years, 1913-1922, the average death rate from Pulmonary Tuberculosis was 0.81. Again, if we take Non-Pulmonary Tuberculosis (disease of the glands, bones, abdomen, etc.) for 1923, the death rate was 0.28, as compared with 0.30 for the previous year, and against the average of 0.36 for the ten years 1913-1922.

In England and Wales the death rate from Pulmonary Tuberculosis was 0.84, and from Non-Pulmonary Tuberculosis 0.23 in the year under report.

### Notification of Tuberculosis.

Year.	Pulmonary.		Non-Pulmonary.	
	No. of Notifications from M.O.H.'s Returns.	Notifications under Tuberculosis Regulations.	No. of Notifications from M.O.H.'s Returns.	Notifications under Tuberculosis Regulations.
1914	2,209	2,056	1,133	1,052
1915	1,995	1,853	1,085	1,001
1916	1,798	1,610	840	841
1917	1,828	1,742	662	739
1918	2,010	1,780	786	577
1919	1,804	1,502	588	501
1920	1,870	1,738	532	457
1921	2,107	1,698	560	493
1922	2,193	1,938	591	566
1923	2,173	1,989	695	633

The notifications increased during 1923, and this may be partly due to the Circular No. 425 of the Ministry of Health issued in August, 1923. Unfortunately, however, such notification still remains inadequate, but it is hoped to render these returns more complete in future by our local efforts.

During 1923 there were too many instances of death from tuberculosis occurring where cases had not been notified or where notification had been delayed until shortly before death.

It is clear that public schemes for dealing with the problem of tuberculosis must be largely nullified unless the patient can be brought under observation at an early stage. Fortunately, there is now an increasing tendency for medical practitioners in many areas to seek the assistance of the special means provided under the County Tuberculosis Scheme.

The importance of getting cases of tuberculosis under observation at the earliest possible moment cannot be too frequently or too strongly emphasised. Prompt action by the practitioner, the use of facilities for early diagnosis and early application for advice by the patient must be supplemented by close co-ordination with the medical inspection of school children, and the examination of contacts in infected families. These points are receiving careful attention in this County. Before proceeding to the various sections of the scheme it may be well to give a brief outline of the method by which patients came into touch with the Department and the resources at our disposal for the treatment of tuberculosis.

**Dispensary Organisation.**—It has been the continuous endeavour at Dispensaries to bring attendances within workable limits. It is now recognised that Dispensary Organisation is the



more important branch of our Tuberculosis Scheme, as the whole basis of the work here is towards early diagnosis and prevention rather than cure.

The Tuberculosis Officer's work in co-operation with the medical practitioners and local health officials is focussed chiefly on diagnosing cases referred to them, advising appropriate treatment and investigating tactfully and at first hand the home conditions.

Ordinary symptomatic treatment is not undertaken at the dispensary if the patient has a doctor and is at the time receiving treatment. The Tuberculosis Officer and his staff deal more particularly with diagnosis, and special forms of treatment; he exercises general supervision over domiciliary treatment in co-operation with the insurance practitioner or family doctor, and gives special attention to general hygiene and preventive measures, in conjunction with the doctor and the Local Sanitary Authority.

The report and recommendations of the Special Tuberculosis Sub-Committee approved and adopted by the West Riding County Council on the 11th July, 1923, include:—

1. That continuous treatment as distinct from diagnosis and consultation, at the dispensaries, should be limited to those patients whose treatment requires special knowledge or technical skill, and to those who are unable to obtain other adequate medical attendance.
2. That where special treatment is not recommended by the District Tuberculosis Officer, insured patients be referred by him to their panel doctor under the National Health Insurance Act, and uninsured patients to their private doctor (with the exception of those mentioned in Clause 1), and that consultations between the District Tuberculosis Officers and Medical Practitioners be offered.
3. That when a patient is recommended by the District Tuberculosis Officer for institutional treatment the case will, in the meantime, be referred for medical attention to the General Practitioner and will be visited by a Nurse acting under the General Practitioner. On notification that a bed is available the General Practitioner will sign the necessary certificate that the patient is ready and fit to travel.
4. That the number of patients in attendance at any one session should be so limited that each patient may receive adequate attention by the District Tuberculosis Officer.
5. That medicaments, such as cod liver oil, etc., be only supplied free of cost to cases definitely under treatment at the Dispensary.

6. That a greater amount of attention on the part of the dispensary staffs be paid to problems dealing with prevention, including those measures aiming at earlier diagnosis, closer co-operation with the Medical Practitioner, more extended examination by the District Tuberculosis Officers, and following up of contacts and suspects, and active co-operation with the local medical officers of health in the area.
7. That facilities be granted to the District Tuberculosis Officers for the use of X-Ray in the diagnosis of the disease. Such facilities be granted only with the approval of the County Medical Officer or Chief Tuberculosis Officer.
8. In the work of district dispensaries records should be kept by the District Tuberculosis Officers of all work, and every nurse attached to a Dispensary should keep a proper case book.

In consequence of the Memorandum 286 issued by the Ministry of Health in December, 1923, a few changes in procedure were necessary in the effective carrying out of the new scheme, and particularly in connection with the Tuberculosis Officer's relations with the practitioners in his area. The object of this Memorandum was to bring to the notice of Tuberculosis Officers the reports required from general practitioners under their terms of service on the Panel. The revised Terms of Service for Insurance Practitioners contained in the first schedule to the National Health Insurance (Medical Benefit) Regulations, 1924, provide that the initial and periodical reports by Insurance Practitioners on their cases should be furnished direct to Tuberculosis Officers.

Practitioners are expected to send reports to the Tuberculosis Officer as follows:—

Form G.P.17 (Revised)—(a) To be supplied in the case of every insured person diagnosed by the Medical Practitioner as one of Tuberculosis. (b) To be supplied by Practitioner on request of District Tuberculosis Officer in every insured case, not included in (a), which are found by the District Tuberculosis Officer otherwise than through information received from the General Practitioner.

Form G.P.35.—To be used in cases in which there are indications of the possible presence of tuberculosis which do not suffice to justify notification.

Form G.P.36.—To be prepared by General Practitioner in regard to each insured patient referred to him by the District Tuberculosis Officer for treatment. These reports to be supplied to District Tuberculosis Officers at reasonable intervals—not exceeding 3 months—during such treatment.



Under the revised Dispensary Scheme for the West Riding new forms have been issued which closely follow the Model Forms Z1 to Z5, as appended to Memo. 286 of the Ministry of Health, December, 1923. The Scheme contemplates that in all cases which come before the Tuberculosis Officer he should, unless he finds the patient not to be suffering from tuberculosis, come to a definite conclusion whether the patient should (a) attend the Dispensary for observation, (b) be admitted to a residential Institution for treatment and observation, (c) be advised Domiciliary Treatment.

As the recommendations of the Committee in regard to Dispensary re-organisation did not take effect until towards the end of the year, no appreciable difference in the numbers of those attending dispensary and those recommended domiciliary treatment can be observed for the years 1922 and 1923.

*Home Visits by the Tuberculosis Health Visitor.*—The Tuberculosis Officer receives each week from the County Medical Officer of Health the names and addresses of all persons notified to him as suffering from tuberculosis, and the patients so notified are visited by the Tuberculosis Health Visitor. Each patient receives from the nurse instructions both written and verbal as to the general hygienic measures required. The patient is also instructed how to take his or her own temperature and keep accurate records. Arrangements are also made for the attendance of the patient and contacts at the Dispensary. The number of visits paid to each patient varies, the worst cases receiving more frequent visits.

During the year the following domiciliary visits were made by Dispensary Nurses and Health Visitors:—

		Civilians.	Ex-service men.	Total.
By Dispensary Nurses	...	15211	5691	20902
By Health Visitors	...	6351	1340	7691

In addition to the above 1,669 visits were paid by the District Tuberculosis Officers in person, many of which formed the subject of consultation with the private doctor concerned.

Sixty Health Visitors are employed in the Scheme, and their work in the more rural areas permits of more attention being paid to matters of preventive import on the part of Dispensary Staff proper.

The work accomplished by the full staff of Tuberculosis Officers in 1923 shows a big increase on the previous year, due mainly to the large number of contacts examined. Altogether the medical staff examined 4,614 new patients at the Dispensaries for diagnosis, etc., or consultative purposes. The attendance of "old" patients at the 35 dispensaries in use numbered 60,540. The Tuberculosis Health Visitors made 28,593 visits and re-visits to patients' homes. Accurate record is kept of visits paid to patients, home conditions, financial status, etc., by all Health Visitors and Dispensary Nurses; all reports are periodically submitted to District Tuberculosis Officers and filed.

The following figures, arising out of an analysis of the reports submitted by Health Visitors and Tuberculosis Nurses during 1923, reveal to some extent the unsatisfactory conditions under which a large proportion of the tuberculous patients in this area are to be found:—

Cases occurring in houses regarded as insanitary (in one or more respects) ... ..	642
Cases from houses where more than one family reside ...	598
Cases from overcrowded houses ... ..	558
No. of patients found to be sleeping in—	
Separate room ... ..	1086
Separate bed but not separate room ... ..	1092
Two in a bed ... ..	2714
More than two in a bed ... ..	771

In commenting on the conditions found in his area a District Tuberculosis Officer writes:—

“ An interesting point in connection with the home conditions is that the opportunity for infection from patient to patient would not appear to arise so much from lack of space in the homes as from lack of beds and bedding. Nurses report that one bed has often to do duty for two or three persons where there are other bedrooms available, but the family cannot afford the beds and bedding or will not provide them. This does not apply only in the case of man and wife: it applies also where a baby or child occupies the same bed as father and mother. Repeated urging and visiting results in practically no progress in the matter. In special cases where poverty alone was the plea, separate beds and bedding would probably be used if supplied by the Authority. The above points account for the fact that although there were only 26 cases of overcrowding, according to the records of available house space, there were 38 cases of more than two in a bed, and 650 instances of patients occupying a bed with another person.”

**The Sanatorium.**—The increase in the number of beds during the last five years has been to some extent brought about by the gradual reduction in maintenance costs. In previous Reports it was shown that the Ministry of Health agreed that any saving shown against the aggregate amounts allowed in the estimates may be set aside for the acquisition of further accommodation.

Number of beds available, December, 1919 ...	350
,,                   ,,                   ,,                   1920 ...	480
,,                   ,,                   ,,                   1921 ...	579
,,                   ,,                   ,,                   1922 ...	609
,,                   ,,                   ,,                   1923 ...	648



Institution.	Type of Case admitted.	No. of Beds available		
		Males.	Fe- males.	Chil- dren.
Middleton-in-Wharfedale	Pulmonary Mixed	250	—	—
Cardigan, near Wakefield	„ Mixed	—	50	—
Dean Head, Horsforth	„ Early	—	54	—
Mitchell Memorial Home	„ Early	30	—	—
Morton Banks, Keighley	„ Mixed	—	59	—
Eldwick, Bingley ...	„ Early	—	—	39
Wyton Hostel, Huntingdon	„ Early	—	—	66
Oakwood Hall, Rotherham	„ Mixed	15	8	7
Leasowe, Cheshire ...	Non-Pulmonary	—	—	16
Alton, Hampshire ...	„	—	—	16
Marguerite Home, Thorparch	„	—	—	12
Other Institutions ...	Pulmonary Early	—	14	12
Totals ..		295	185	168

648

During the year 1923 there were for Sanatorium treatment of Pulmonary Tuberculosis in adults 1111 admissions and 1101 discharges, and 303 admissions and 269 discharges in the case of children.

For the treatment of non-pulmonary conditions in children there were 59 admissions and 54 discharges. The immediate results of treatment for pulmonary cases are shown in Tables IV and VI and for non-pulmonary conditions in children Table VIII.

TABLE III.

## Institutional Treatment of Pulmonary Cases during 1923 (Adults).

INSTITUTION.	ADMISSIONS.									Total No. of Ad- mis- sions.	DISCHARGES.									Total No. of Dis- charg- es.
	CIVILIAN MALES.			EX-SERVICE MEN.			FEMALES.				CIVILIAN MALES.			EX-SERVICE MEN.			FEMALES.			
	Stage			Stage			Stage				Stage			Stage			Stage			
	I.	II.	III.	I.	II.	III.	I.	II.	III.		I.	II.	III.	I.	II.	III.	I.	II.	III.	
Middleton Sanatorium	160	164	56	98	125	38	—	—	—	641	164	140	39	121	131	31	—	—	—	626
Mitchell Mem. Home	—	—	—	24	26	9	—	—	—	59	—	—	—	19	30	9	—	—	—	58
Oakwood Hall Sanatorium	—	1	18	—	4	12	2	9	11	57	1	4	17	—	3	15	4	11	11	66
Cardigan "	—	—	—	—	—	—	67	33	10	110	—	—	—	—	—	—	61	41	11	113
Morton Banks Sanatorium	—	—	—	—	—	—	9	39	33	81	—	—	—	—	—	—	12	32	35	79
Dean Head Sanatorium	—	—	—	—	—	—	46	50	16	112	—	—	—	—	—	—	59	47	9	115
Miscellaneous Sanatoria	—	—	—	—	—	—	35	15	1	51	—	—	—	—	—	—	34	9	1	44
Total	160	165	74	122	155	59	159	146	71	1111	165	144	56	140	164	55	170	140	67	1101



TABLE IV.

## Immediate Results of Institutional Treatment of Patients discharged during 1923 (Adults).

## (a) Patients with Tubercle Bacilli in the Sputum.

Institution.	Sex of Patients Treated.	Stage I on admission.				Stage II on admission.				Stage III on admission.				Total—All Stages.			
		Condition Improved.	Condition Unchanged.	Worse.	Died in Institution.	Condition Improved.	Condition Unchanged.	Worse.	Died in Institution.	Condition Improved.	Condition Unchanged.	Worse.	Died in Institution.	Condition Improved.	Condition Unchanged.	Worse.	Died in Institution.
Middleton Sanatorium	M.	14	1	4	—	30	4	11	5	15	2	5	6	59	7	20	11
Mitchell Memorial Home	M. Ex-service	1	—	—	—	5	2	1	—	1	—	1	—	7	—	2	—
Oakwood Hall Sanatorium	M.	—	—	—	—	5	—	—	—	5	6	4	7	10	6	4	7
"	F.	—	—	—	—	2	—	—	—	1	1	1	2	3	1	1	2
Cardigan Sanatorium	F.	3	—	—	—	4	1	3	1	5	—	1	1	12	1	4	2
Morton Banks Sanatorium	F.	2	—	—	—	4	1	9	5	9	3	3	11	15	4	12	16
Dean Head Sanatorium	F.	6	—	—	—	12	5	6	—	1	—	4	7	19	5	10	7
Miscellaneous Sanatoria	F.	—	—	—	—	1	—	2	1	—	—	1	—	1	—	3	1
		26	1	4	—	63	13	32	12	37	12	20	34	126	26	56	46

## (b) Patients with no Tubercle Bacilli in the Sputum.

Middleton Sanatorium	M.	250	19	2	1	177	12	5	8	23	5	2	6	450	36	9	15
Mitchell Memorial Home	M.	15	8	—	—	10	5	—	1	4	2	1	1	29	15	1	2
Oakwood Hall Sanatorium	M.	1	—	—	—	8	—	—	—	4	—	—	—	13	—	—	1
"	F.	8	—	—	—	11	1	—	—	—	1	1	—	19	2	1	—
Cardigan Sanatorium	F.	53	2	—	—	31	2	—	—	4	1	—	—	88	5	—	—
Morton Banks Sanatorium	F.	10	—	1	—	11	—	—	1	8	1	—	—	29	1	1	1
Dean Head Sanatorium	F.	43	2	—	—	21	3	—	—	—	—	—	—	64	5	—	—
Miscellaneous Sanatoria	F.	32	2	—	—	3	1	—	—	—	—	—	1	35	3	—	1
		412	33	3	1	272	24	5	10	43	10	4	9	727	67	12	20

Note.—For the purposes of this table, cases discharged with less than two weeks' treatment have been eliminated.

TABLE V.

Institutional Treatment of Pulmonary Cases during 1923 (Children).

INSTITUTION.	ADMISSIONS.						DISCHARGES.							
	MALES.			FEMALES.			MALES.			FEMALES.				
	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.	Stage I.	Stage II.	Stage III.		
													Total No. of Admissions.	
Eldwick Sanatorium	1	—	—	58	22	1	82	2	—	—	49	20	—	71
Eastby Sanatorium	13	3	—	—	—	—	16	31	10	—	—	—	—	41
Wyton Sanatorium	62	23	2	28	19	—	134	33	14	—	16	11	—	74
Miscellaneous Sanatoria	9	4	3	27	19	9	71	20	3	7	23	20	10	83
Totals	85	30	5	113	60	10	303	86	27	7	88	51	10	269



TABLE VI.

## Pulmonary Tuberculosis in Children.

## Immediate Results of Institutional Treatment of Children Discharged during 1923.

INSTITUTION.	Sex.	Stage I.				Stage II.				Total—Stages I and II.			
		Condition Improved.	Condition Unchanged.	Condition Worse.	Died in Institution.	Condition Improved.	Condition Unchanged.	Condition Worse.	Died in Institution.	Condition Improved.	Condition Unchanged.	Condition Worse.	Died in Institution.
Eldwick Sanatorium	M	2	—	—	—	—	—	—	—	2	—	—	—
"	F	48	1	—	—	20	—	—	—	68	1	—	—
Eastby Sanatorium	M	31	—	—	—	10	—	—	—	41	—	—	—
Wyton Sanatorium	M	33	1	—	—	14	—	—	—	47	1	—	—
"	F	16	—	—	—	11	—	—	—	27	—	—	—
Miscellaneous Institutions	M	19	—	—	—	5	1	—	2	24	1	—	2
"	F	20	1	—	2	21	—	1	4	41	1	1	6
		169	3	—	2	81	1	1	6	250	4	1	8

Note.—Cases discharged with less than two weeks' treatment have been eliminated.

TABLE VII.

## Non-Pulmonary Tuberculosis in Children.

## Classification of Cases Treated and Discharged during 1923.

INSTITUTION.	ADMISSIONS.								Total No. of Admissions.	DISCHARGES.								Total No. of Discharges.
	MALES.				FEMALES.					MALES.				FEMALES.				
	Glands.	Bones & Joints.	Internal Organs.	Other cases including Skin.	Glands.	Bones & Joints.	Internal Organs.	Other cases including Skin.		Glands.	Bones & Joints.	Internal Organs.	Other cases including Skin.	Glands.	Bones & Joints.	Internal Organs.	Other cases including Skin.	
Leasowe Hospital	1	4	1	3	1	7	3	2	22	1	7	1	—	5	6	1	1	22
Alton Cripples Home	—	6	—	2	—	7	—	—	15	—	8	—	1	—	4	—	—	13
Marguerite Home	—	4	—	—	—	4	—	—	8	1	3	—	—	1	2	1	—	8
King Edward VII Hospital	—	3	—	—	—	3	—	—	6	—	1	—	—	—	2	—	—	3
Other Institutions	—	1	1	—	5	1	—	—	8	—	—	—	—	—	8	—	—	8
Totals	1	18	2	5	6	22	3	2	59	2	19	1	1	6	22	2	1	54



TABLE VIII.

## Non-Pulmonary Tuberculosis in Children.

Immediate Results of Treatment of Cases Discharged during 1923.

INSTITUTION.	GLANDS.					BONES & JOINTS.					INTERNAL ORGANS.					OTHER CASES (including Skin).				
	Disease arrested.	Much improved.	No Improvement (including deaths).	Diagnosis unfirmed.	Removed without treatment.	Disease arrested.	Much improved.	No Improvement (including deaths).	Diagnosis unfirmed.	Removed without treatment.	Disease arrested.	Much improved.	No Improvement (including deaths).	Diagnosis unfirmed.	Removed without treatment.	Disease arrested.	Much improved.	No Improvement (including deaths).	Diagnosis unfirmed.	Removed without treatment.
Leasowe Hospital	4	—	—	—	1	9	—	1	3	—	2	—	—	—	—	1	—	1	—	—
Alton Cripples Home	—	—	—	—	—	10	2	—	—	—	—	—	—	—	—	1	—	—	—	—
Marguerite Home	—	1	—	—	—	—	4	1	—	—	2	—	—	—	—	—	—	—	—	—
King Edward VII Hosp.	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—
Eldwick Sanatorium	—	7	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	4	8	1	—	1	20	6	4	3	—	4	—	—	—	—	2	—	1	—	—

The results of treatment in the case of children suffering from tuberculosis of bones and joints, etc., and treated at the various institutions, such as Alton, Leasowe, Thorp Arch, etc., have been very satisfactory. These institutions employ the most up-to-date methods of treatment, including amongst other forms heliotherapy. It is still a matter to be deplored, however, that so many children return to home conditions squalid and overcrowded, and such as are likely to nullify any material advantage gained in treatment at sanatoria.

In many districts the housing problem is a grave one, and is responsible to a great extent for the dissemination of tuberculosis. Until the amelioration of this, the greatest of social evils, we cannot hope to attain the best results from our Tuberculosis Scheme, however exemplary it may be.

The object of our Sanatorium Scheme is to educate the patient and to restore his working capacity. To attain this object it is necessary for the patient to be admitted for treatment in the earliest stages of the disease. The more advanced the type the more remote the cure. Too often is it the experience of the physician to find patients with advanced disease giving a history of having been at work when they should have been at rest and under treatment; more especially is this the case in patients who are the bread-winners of a family. In order that a constant supervision may be kept over a patient, and details appertaining to his case attended to, it is essential that a liaison should exist between the dispensary and sanatorium. This has been our aim throughout.

The duration of treatment necessarily varies with the extent and severity of the disease. The period must be sufficiently long as to ensure the patient having every chance of benefiting from his treatment. It should also include an education in the mode of living, so that he can adapt himself accordingly on his return home.

In advanced and infective cases, where it is considered that there is little hope of recovery, the scheme aims at segregation more than treatment and in employing such palliative measures as are necessary for the patient's comfort. Throughout the year there has been little difficulty in maintaining the numbers at our Sanatoria, as the average weekly waiting list has been high, and in excess of that of the previous year, indicating thereby a more vigorous search amongst contacts, and that practitioners are taking advantage of the scheme and are sending forward cases to the clinics for diagnosis and treatment.



The following table shows the average weekly waiting list for Institutional Treatment during 1923:—

Adult Males—	Civilians	...	...	...	36
	Ex-Service Men	...	...	...	31
Adult Females	...	...	...	...	54
Boys (Pulmonary)	...	...	...	...	116
Girls (Pulmonary)	...	...	...	...	115
Boys (Non-Pulmonary)	...	...	...	...	11
Girls (Non-Pulmonary)	...	...	...	...	14
Total					377

Number of re-admissions to Middleton-in-Wharfedale Sanatorium during 1923:—

Civilians—	Class I	...	...	...	10
	Class II	...	...	...	28
	Class III	...	...	...	13
Ex-Service Men—	Class I	...	...	...	10
	Class II	...	...	...	26
	Class III	...	...	...	10

It has been brought to notice by Superintendents of sanatoria that there are many instances of ill-health in children due not so much to an inherited chest weakness as to concurrent conditions, such as tonsils, adenoids, defective vision, and dental caries, etc. All claim that it would be to the child's advantage to have such defects attended to before admission to Sanatorium. Steps have been taken to effect this. At Eldwick there were during the year seven children operated upon for tonsils and adenoids and one for tuberculous glands in the neck. Eleven children were examined at the Eye and Ear Hospital, Bradford, and were provided with suitable glasses, and thirty children requiring dental attention were treated by the Visiting Dentist.

*Surgical Appliances.*—In the case of children and others suffering from tubercular conditions of bones and joints, the County Council provide surgical appliances on the recommendation of the Tuberculosis Officers in cases where financial circumstances of the parents are insufficient to meet the cost. In a few instances parents or relatives make some contribution towards the cost of the apparatus. The following appliances or apparatus were provided during the year 1923:—

- 1 Thomas Hip Splint.
- 2 Spinal Supports.
- 2 pairs Crutches.
- 3 Surgical Boots.
- 1 Walking Caliper.

In two cases repairs to appliances previously provided were carried out.

## Analysis of Cases of Non-Pulmonary Tuberculosis treated during 1923.

	Glandular.	Osseous.	Abdominal.	Other.
Adult Males	50	53	18	25
Adult Females	55	31	13	35
Children—Boys	322	55	74	164
—Girls	301	61	41	168
	728	200	146	392

*Eastby Sanatorium.*—During the year 25 children were transferred from Eastby to Wyton Hostel and other Sanatoria.

*Middleton Sanatorium.*—Accommodation—250 beds (Adult Males). During the twelve months ended 31st December, 1923, there were 641 patients admitted to the Sanatorium and 626 patients discharged. (For Analysis of Admissions to Middleton during 1923 see Table IV.)

The system of treatment adopted at Middleton is now common to most modern Sanatoria. It consists in a completely open-air life, a regular and ordered daily routine, a diet sufficient and nourishing without being excessive, and a system of graduated rest and exercise which provides at the same time interesting occupation, all important in tuberculosis.

Artificial pneumothorax is employed either in cases of severe or repeated hæmoptysis or where there has been lack of response to the usual sanatorium methods. When the treatment has been useful the patients return to the Sanatorium to be refilled. The results of this method in the past 12 months are shown in Table IX. It will be noted that the numbers selected for artificial pneumothorax are necessarily limited, as ordinary sanatorium methods of treatment prove successful in a large number of cases, and patients who do not respond to it may present contra-indications to the induction of artificial pneumothorax, such as involvement of both lungs or unsuitable temperament. Other patients lived too far from the Sanatorium to have refills.

The social side of Sanatorium life is carefully arranged, and the necessary variety of entertainment has been well maintained in the past twelve months. A series of concerts and other entertainments were given, and the outdoor sports—croquet and bowls, etc.—were enjoyed throughout the summer.

*X-Ray Examinations at Middleton during 1923.*—During the past year the cases dealt with were of four classes—

1. Cases in which there was no ordinary clinical evidence of Tuberculosis to be found.



2. Cases of Pulmonary Tuberculosis in which a radioscopic diagnosis was called for because the ordinary clinical signs were very slight or indefinite, etc.
3. Cases in which Tuberculosis was suspected in parts other than the lungs.
4. More advanced cases of Pulmonary Tuberculosis in which improvement under treatment was not taking place and in which, therefore, the question of inducing artificial pneumothorax had to be considered.

In the second class there were eleven cases, 7 male civilians and 4 ex-service men; of these 5 showed evidence of pulmonary tuberculosis on the skiagram, and 6 were negative.

In the third class there were four cases, 2 male civilians and 2 ex-service men. Both results were positive in the case of the ex-service men, and both negative in the case of the civilians. In one of the soldiers a piece of shrapnel was removed from the leg under X-ray. The majority of cases radioscopically examined came under the third class. The X-ray report was very helpful to a decision as to whether artificial pneumothorax should be induced or not. Of cases in which it was done a series of plates was taken showing the condition of the lung and pleura after each operation. Under this class 15 civilians and 12 ex-service men were X-rayed during the year.

TABLE IX.

## Cases treated by the Induction of Artificial Pneumothorax at Middleton Sanatorium.

Case No.	Group Turban Gerhardt.	Indication for Induction of Artificial Pneumothorax.	Date of first operation.	Result.	Remarks. Refills with intervals.
1.	III (R3L1)	Chiefly one-sided disease ... ..	20/7/21 (12 months)	Much improved ...	Discharged 9/5/23. Refills at 24 days' intervals.
2.	II (R2L1)	One lung caseating ... ..	29/5/22 (5 months)	Arrested disease. T.B. on discharge	Discharged 23/3/23. Refills at 24 days' intervals.
3.	III (R3L2)	Case otherwise hopeless (last resort) ...	12/6/22 (Right) 20/12/22 (Left)	Died ...	2 to 3 weeks' intervals.
4.	III (R3L2)	Commenced for hæmoptysis ... ..	27/6/22 (8 months)	Arrested disease. Discharged 2/3/23	24 days' intervals.
5.	III (R3L1)	Chiefly one-sided disease (hæmoptysis) ...	26/7/22 (5 months)	Moderately improved ...	Do.
6.	III (R3L2)	Acute case; to secure quiescence ... ..	25/9/22 (14 months)	Striking result—arrested	Do.
7.	III (R3L2)	Second admission, so special attempt made	18/10/22 (6 months)	Arrested disease. T.B. on discharge	Do.
8.	III (R3L2)	Acute case; hopeless otherwise ... ..	1/11/22 (3 months)	Died ...	2 to 3 weeks' intervals.
9.	III (L3R2)	Trainee—hæmoptysis; hopeless otherwise	16/11/22 (4 months)	Not improved ...	Do.
10.	III (R3L3)	As a last resort (gastritis complication) ...	18/12/22 (3 months)	Do. ...	2 weeks' intervals.
11.	III (R3L3)	Acute case; hopeless otherwise ... ..	15/1/23 (3 months)	Do. ...	2 to 3 weeks' intervals.
12.	III (R3L1)	Acute case ... ..	31/1/23 (6½ months)	Do. ...	24 days' intervals.
13.	II (R2L2)	For hæmoptysis ... ..	14/2/23 (7 months)	Much improved ...	Do.
14.	III (R3L3)	For hæmoptysis ... ..	1/3/23 (5 months)	Moderately improved	Do.
15.	III (R3L3)	Acute case; hopeless otherwise ... ..	14/3/23 (2 months)	Died ...	2 to 3 weeks' intervals.
16.	III (R3L3)	For hæmoptysis (left own accord) ... ..	13/4/23 (2 months)	Moderately improved	24 days' intervals.
17.	III (R3L2)	Progress slow prior to induction ... ..	13/5/23 (5 months)	Do. ...	Do.
18.	III (R3L1)	Chiefly one-sided disease (left prematurely)	18/6/23 (2 months)	Do. ...	Do.
19.	III (R3L3)	Slow progress prior to induction ... ..	19/6/23 (10 months)	Much improved ...	Do.
20.	III (R3L3)	For hæmoptysis ... ..	27/6/23 (10 months)	Moderately improved	Do.
21.	III (L3R2)	Acute case; hopeless otherwise ... ..	12/9/23 (2 months)	Died ...	2 weeks' intervals.
22.	III (R3L3)	Slow progress prior to induction ... ..	15/11/23 (into 1924)	Moderately improved	24 days' intervals.



TABLE X.

Immediate Results of Institutional Treatment of Pulmonary Cases. (West Riding Administrative County.)  
From 1912 to 1923 (inclusive).

Adults or Children.	Stage of Disease on Admission.*	Sputum.	No. of Cases.	Condition on Discharge from Sanatorium.			
				Im- proved. %	Sta- tion- ary. %	Worse. %	Died in Insti- tution. %
Adults (15 and over) Total: 7787 cases.	I.	Positive	(M) 161	78.9	9.3	6.8	5.0
			(F) 49	83.7	6.1	4.1	6.1
		Negative	(M) 1924	90.8	8.3	0.4	0.5
			(F) 885	95.2	4.2	0.1	0.5
		Totals:	3019	91.3	7.2	0.7	0.8
	II.	Positive	(M) 512	79.7	9.2	6.6	4.5
			(F) 211	63.9	10.4	17.1	8.6
		Negative	(M) 1484	88.7	7.6	1.4	2.3
			(F) 657	93.3	4.4	0.6	1.7
		Totals:	2864	86.3	7.4	3.3	3.0
	III.	Positive	(M) 951	57.3	18.9	7.4	16.4
			(F) 423	53.7	15.3	8.5	22.5
		Negative	(M) 344	72.1	16.0	3.8	8.1
			(F) 186	70.4	9.2	4.8	15.6
		Totals:	1904	60.4	16.7	6.7	16.2
Children (under 15). Total: 1014 cases.	I.	Positive	(M) 1	100.0	—	—	—
			(F) 4	75.0	—	—	25.0
		Negative	(M) 277	97.5	1.8	0.7	—
			(F) 324	97.6	1.5	—	0.9
		Totals:	606	97.3	1.7	0.3	0.7
	II.	Positive	(M) 2	100.0	—	—	—
			(F) 1	—	100.0	—	—
		Negative	(M) 132	92.4	6.1	—	1.5
			(F) 210	93.3	1.5	2.9	2.3
		Totals:	345	92.8	3.5	1.7	2.0
	III.	Positive	(M) 2	100.0	—	—	—
			(F) 21	47.6	9.6	14.3	28.5
		Negative	(M) 9	100.0	—	—	—
			(F) 31	71.0	22.6	—	6.4
		Totals:	63	68.2	14.3	4.8	12.7

\* Classified according to the Turban-Gerhardt system.

NOTE.—For the purposes of this table, cases discharged with less than two weeks' treatment have been eliminated.

**Open-Air Domiciliary Shelters.**—Shelters with equipment have continued to be loaned to tuberculous patients on the recommendation of the District Tuberculosis Officers, due regard being paid to the home conditions and the accessibility as well as the suitability of the site upon which the shelter is to be placed. During the period covered by this report, 122 persons have had the use of shelters, which number includes 38 new occupants since the preceding year. The shelters are periodically inspected by the District Tuberculosis Officers, Dispensary Nurses and Health Visitors, and a report is submitted as to the general condition of the shelter and equipment and the use made thereof. Many of the shelters have now been in use a number of years, and repairs and renewal parts are frequently necessary whilst a number of the older shelters have been destroyed during the year; but it is intended to restore the number to 100 by purchasing additional new shelters.

I desire to again place on record my acknowledgment of the valuable assistance I have received from Medical Officers of Health and Sanitary Inspectors throughout the Administrative County in connection with the disinfection of shelters and equipment and for inspections and reports upon sites, etc.

**Extra Nourishment.**—This form of treatment is a valuable adjunct, particularly in cases where a patient is awaiting admission to Sanatorium, by preventing aggravation of the condition owing to lack of nourishment. The average number of persons receiving the grant during the year was 316, and the approximate cost was £2,750.

**Propaganda.**—Early in the year the Joint Sub-Committee and the West Riding Insurance Committee submitted a report as to the propaganda work thought necessary in the prevention and treatment of tuberculosis. The programme included:—

That arrangements be made for 24 lectures to be given during the winter session 1923-24 (inclusive of one lecture at Denaby Main) at the 10 centres of the Riding, and that application should be made to the Education Committee of the County Council for permission for an address to be given to all school children in the area during Health Week (commencing October 7th, 1923), and at the conclusion of each address a printed card, containing information regarding health, be given to each child. The addresses to be given as far as possible by Medical Practitioners residing in the area, the West Riding Panel Committee being asked to co-operate in the selection of doctors for the purpose.

That it should be arranged in those Urban and Rural districts in which there is a Public Cinema that the school children in those areas attend such cinema or picture house for the lectures.



The programme further suggested that a circular letter should be sent to all Ministers of Religion in the Riding asking that in the course of the sermon to be preached on the Sunday in Health Week some reference be made to the subject of Health, and that the assistance of the Public Press be sought with a view to the publication of special articles upon Health subjects during Health Week, as well as arranging for the printing of Health Posters for exhibition in public places, such as public buildings, chemists' shops, doctors' surgeries, offices of Approved Societies, etc., and such posters to convey health hints boldly printed.

The result has been entirely successful and encouraging, most of the lectures were well attended and the liveliest interest shown. The support given by Local Authorities and others indicates that the importance of this branch of the Tuberculosis Scheme has been accepted at its true value.

**Refractories Industries (Silicosis) Scheme, 1919.**—During the year 1923, 596 examinations were conducted of workers engaged in the Refractories Industries. These are classified in the following table:—

		Processes in which Workers were engaged.															
		Mining.				Quarrying.				Brick Works.				Other Processes.			
		Category I.*		Category II.†		Category I.*		Category II.†		Category I.*		Category II.†		Category I.*		Category II.†	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
S. Bryson		55	—	24	—	20	—	—	—	86	—	207	—	—	—	—	—
J. E. Gething		—	—	—	—	—	—	—	—	11	—	—	—	—	—	—	—
W. C. Rivers		10	—	—	—	8	—	—	—	—	—	—	—	1	—	—	—
A. Leitch		—	—	—	—	—	—	—	—	5	—	—	—	—	—	—	—
G. M. B. Liddle		32	—	—	—	—	—	—	—	24	—	—	—	—	—	—	—
G. Crowley		—	—	—	—	—	—	5	—	—	—	—	—	—	—	—	—
Totals ...		97	—	24	—	28	—	5	—	126	—	207	—	1	—	—	—

\* Workers examined once a year.

† Workers examined once every two years.

In addition to the above 108 intermediate certificates of suspension were issued from the area of the Wadsley Bridge Dispensary.

Radiographic examinations were carried out in 23 cases, 20 of which affected workers in the Industries around Sheffield.

*Suspension Cases.*—In the Wadsley Bridge area 15 cases of suspension were dealt with, as follows:—

	Silicosis only.	Silicosis with tuberculosis.
With impairment ... ..	10	2
Without impairment ... ..	—	—
Cases of Total Disablement ... ..	2	1

*Post Mortem Examinations*—

Examinations made ... ..	9
Certificates granted ... ..	4
Certificates refused ... ..	5

Of the 9 cases referred to the Medical Advisory Committee, 7 workmen were suspended, no action being taken in the other 2.

A communication was received at the beginning of the year from the Home Office relative to workers examined under the scheme and found to be suffering from tuberculosis or other disease but not from silicosis, and suggesting that in such cases the Appointed Medical Officer should send to the worker concerned a private and confidential letter, informing him of his condition and advising him to obtain some other class of work not involving exposure to dust. Steps were taken to carry out these suggestions.

**Treatment of Tuberculous Ex-Servicemen.**—During the year under review 339 applications for the following forms of treatment were received from new cases of tuberculosis in ex-servicemen, viz.:—

Sanatorium Treatment ... ..	203
Hospital Treatment ... ..	29
Dispensary Treatment ... ..	82
Domiciliary Treatment ... ..	25

making at the end of 1923 a total of 2,235 ex-service men under various forms of treatment, as follows:—



Category.	Form of Treatment (on 31/12/23).					Totals.
	Sanatorium.	Hospital.	Training (both schemes).	General Dispensary Supervision.	Domiciliary.	
Pension for Tuberculosis granted	40	14	25	730	555	1364
Pension for Tuberculosis finally refused	50	2	—	509	70	631
Right to pension for Tuberculosis not yet decided or no application made	14	—	—	173	30	217
Officers and Ex-service women	—	—	—	10	13	23
Totals ...	104	16	25	1422	668	2235

Institutional treatment of ex-servicemen suffering from pulmonary tuberculosis is divided between Middleton Sanatorium (250 beds), and Mitchell Memorial Home (30 beds), more advanced and infective cases being received at Oakwood Hall (15 beds).

*Concurrent Treatment and Vocational Training.*—Forty-six men have been admitted to Concurrent Treatment and Vocational Training during 1923, and twenty-six remained under training at the end of the year, as follows:—

Training Colony.	Number admitted during 1923.	Number remaining under Training on 31-12-23.	Course of Training.
*Middleton-in-Wharfedale, Nr. Ilkley	9	6	Pig and Poultry Keeping
	4	1	Furniture Repairs
	1	1	Rural Carpentry
Burrow Hill, Frimley, Surrey	3	2	Market Gardening
Hollywood Hall, Wolsingham, Co. Durham	8	6	Furniture Repairs
	2	—	House Repairs
†Liverpool Sanatorium, Frodsham, Cheshire	1	1	Rural Carpentry
	1	—	House Repairs
	3	—	Pig and Poultry Keeping
†Papworth Hall, Cambridge	1	—	House Repairs
	2	1	Carpentry and Joinery
	1	1	Rural Carpentry
National Sanatorium, Benenden, Kent	1	—	Basket and Brush Making
†Preston Hall, Aylesford, Kent	4	1	Market Gardening
	—	1	Horticulture
	1	1	Rural Carpentry
	2	2	Pig and Poultry Keeping
West Heath Sanatorium, Birmingham	2	2	Tinsmith, Art Metal Work, etc.

\* In addition to the above West Riding County Council cases, 26 cases were admitted to Middleton Training Colony from other Local Authorities, and 14 remained under training on 31st December, 1923, as under:—

	Admitted.	Remaining.
Pig and Poultry Keeping ...	9	7
Rural Carpentry ...	10	3
Furniture Repairs ...	7	4

† Colonies under the Old Scheme.



*Position of Ex-Trainees at end of 1923.*—Up to the end of 1923 forty ex-servicemen had been regularly discharged from courses of Concurrent Treatment and Vocational Training, and had been certified “Efficient.” On making enquiries it has been found that the present position of these men as regards employment is as follows:—

1. Working in the occupation in which training was given:—	
Woodworking ... ..	5
Pig and Poultry Keeping ... ..	4
Boot and Shoe Repairing ... ..	1
Jewellery, Watch, Clock and China Repairing ...	1
House Repairing ... ..	1
Horticulture ... ..	1
	— 13
2. Working at miscellaneous occupations other than that in which training was given ... ..	11
3. Not working at any occupation ... ..	12
4. Other cases:—	
(a) Removed from West Riding Administrative Area ...	1
(b) Given permanent position on the staff of Preston Hall Training Colony, Aylesford, Kent ... ..	3
	— 40

Of the thirteen men who are working in the occupation in which training was given, the following is a résumé:—

1. Furniture Repairer	Has commenced business on his own account, but is obtaining very little work.
2. Do.	Has obtained full-time employment on the pit top repairing tubs, in which he finds his training in joinery useful.
3. Cabinet Maker	Assistant to his father, who is a joiner.
4. Rural Carpenter	Has secured repair work with a property owner.
5. Do.	Has obtained part-time employment on the pit top repairing tubs. Has been provided with a workshop by the County Council.
6. Pig and Poultry Keeping	Has secured land and begun with a small stock of pigs and poultry. Hopes to greatly increase his stock next season.
7. Do.	Has a hundred hens and is now making provision for pigs. Has been provided with a workshop by the County Council.
8. Do.	Poultry farming about 4 hours daily.
9. Do.	Working 6 hours daily preparing for coming poultry season.
10. Boot and Shoe Repairer	Works 6 to 8 hours daily at boot and shoe repairing, when fit.
11. Jewellery, Watch, Clock, and China Repairer	Working 6 hours daily; gets a steady stream of repair orders; working in his own home, as he has not been successful in obtaining a shop at a reasonable rental.
12. House Repairer	Employed 9 hours daily on a Council Housing Scheme.
13. Horticulture	Received a grant from the Government and is doing “fairly well” at flower gardening.

*Training Section at Middleton-in-Wharfedale Sanatorium.*—The public opening of the Training Section by the Chairman of the County Council took place on 7th May, 1923. In the course of his address he emphasised the importance of occupational training and urged all concerned to lend a helping hand in making the scheme a success.

In view of the communication from the Ministry of Health, dated 2nd August, 1923, asking the County Council to render assistance in obtaining the settlement of West Riding trainees in their new occupations on discharge from Training Colonies, in November, 1923, the County Council adopted a scheme (1) for providing 20 huts for ex-trainees from the West Riding Administrative County on the lines suggested by the West Riding Architect, at a cost of £600; (2) that when practicable the Stores Department should be asked to purchase from the ex-trainees such articles as they can make, so as to assist the men when they are unable to obtain repair or other work; (3) that the construction of 12 huts be placed in the hands of the Training Colony.

*Workshop Huts and Grants available to Ex-Trainees.*—Where the Ministry of Pensions are satisfied that the trainee on completion of training is able to make suitable arrangements to carry on business, a Civil Liabilities Grant is in many cases available, and a grant of not more than £10 is also made for the purchase of tools, together with a bonus of 5/- per week for every complete week of satisfactory training. Applicants for huts must satisfy the Committee on the following:—

- (1) That the Trainee has satisfactorily completed a course of instruction.
- (2) That land is available and that the site of erection has the approval of the Local Sanitary Authority.
- (3) That the applicant will be prepared to pay any rent and rates which may be levied.

The applicant will be permitted to purchase the hut on making arrangements for that purpose before delivery, in which case payment can be made by instalments, but until the whole of the instalments are paid the hut will remain the property of the County Council.

*Ministry of Pensions' Medical Boards.*—The Chief Clinical Tuberculosis Officer attended four Medical Boards during the year in the capacity of Specialist on Chest Diseases, as against twenty-one in 1922.

*Services as Medical Referees to the Ministry of Pensions.*—During the year upwards of 5,500 Ministry of Pensions' Forms of various denominations were completed or otherwise dealt with by the Department. Of the sum sanctioned by the Treasury for distribution to Councils in England in respect of these special



services during 1923, the County Council has received £451 4s. 6d. In respect of other services the Department has claimed from the Ministry of Pensions a further sum of £143 1s. 4d., making a total income for the year from this source of £594 5s. 10d.

### Care Work.

*New Committees.*—As was anticipated in the Report for the year 1922, the development of the scheme has proceeded in those areas where large masses of population exist. At the end of 1922 there existed centres of organisation at Tadcaster, Huddersfield and Barnsley, the actual area within which these Committees operated corresponding roughly with the northern part of the Pontefract Dispensary Area, and the Huddersfield and Barnsley Dispensary Areas. In January, 1923, a Committee was formed at Pontefract, and at the same time it was decided to form a Committee at Castleford. Both these Committees quickly got into their stride and are now in a flourishing condition and doing excellent work. In the early summer a further step was taken to develop the scheme in the Pontefract Area by the constitution of Committees at Featherstone and Selby. For some time the formation of a Committee to operate in the Doncaster Dispensary Area received much attention, but owing to a series of unpreventable happenings the actual constitution of the Committee did not take place until December, 1923. Prior to the establishment of the Doncaster Committee many cases had received help upon the recommendation of the District Tuberculosis Officer from a fund placed in the hands of a trustee—Dr. A. B. Dunne, the Medical Officer of Health for the Doncaster Rural District—by the late Brigadier-General Sir Alington Bewick-Copley, and with the formation of this Committee the balance of this fund was handed to the Treasurer. Towards the close of the year a meeting was called to consider the best means of covering the thickly populated area lying within a rectangle between the extreme boundaries of Cleckheaton on the north-west, Methley on the north-east, Emley on the south-west, and Sharlston on the south-east. The area now covered, including places where definite attempts to form Committees are projected, is roughly indicated by that part of the Administrative County which lies south of a line drawn from York to Springhead, excluding the Wortley, Rotherham and Kiveton Park Districts. Progress is necessarily slow, and much work is still to be done not only in cultivating new areas, but also in stimulating the growth and development of existing Committees.

*Conference at County Hall.*—In March, 1923, a Conference was held at the County Hall, to which were invited members of existing Care Committees, as well as persons who might be interested in the movement. The object was two-fold—(1) to have an interchange of ideas arising out of the experience of the past and (2) to consider by what means further development could be secured. The Conference was a success under both heads. Valuable experience had been gained, and one important

point which had been put forward in drafting the scheme was strongly brought out, i.e., that no set scheme with fixed constitution and procedure could successfully be applied to every district, but that each district should fix first upon the common goal and endeavour to arrive there by the methods most suitable to the means available.

*Results of Work.*—It will be appreciated that much of the work of a Care Committee is of a nature which cannot be expressed in formal tables. The friendly work and timely encouragement form part of the stock-in-trade of the sympathetic worker, and used with discretion form a powerful factor in influencing a patient to take heart and continue to strive for that which we are spending so much to attain, i.e., a patient restored so as to be able to resume his place in society, as a self-supporting unit. Of the more material aspects of their work the following is a summary from the reports submitted:—

	Men.	Women.	Children.
Underclothing ... ..	56	20	6
Suits ... ..	13	9	1
Boots ... ..	23	9	4
Overcoats ... ..	2	—	1
Food ... ..	21	8	5
Convalescent Home Treatment ...	5	—	7
Care of Family ... ..	1	—	—
Financial Help ... ..	2	—	—
Travelling Expenses ... ..	5	—	—
Bed and Bedding ... ..	1	—	—
Materials supplied for making up	1	—	—
	<hr/> 130 <hr/>	<hr/> 46 <hr/>	<hr/> 24 <hr/>

The District Tuberculosis Officers report that many cases receive help at subsequent intervals without forming the subject of a direct request from the Dispensary and do not therefore occur in the above analysis. Further, cases are revealed as having been helped before attending the Dispensary, which also are not shewn above.

*Other Sources of Help.*—It might not be inappropriate to here refer to the valuable help rendered by the United Services Fund. Were it not for their efforts, many ex-service men would be quite unable to accept treatment at a Sanatorium. Not only do they help in the provision of clothing, but they will also help the patient's family in a very generous manner where necessary.

Much help has been rendered by the Emergency Help Committee for the benefit of ex-service men whose applications for pensions were pending, or who were in dire need. The British Legion have also rendered useful help.



*Finance.*—The work of these Committees is entirely voluntary, and any expenditure which they incur is met from their own funds, the raising of which is their own concern. Some idea of the whole-hearted efforts of these Committees may be gauged from the funds raised during the year. From the information available nearly £500 was raised during 1923. This is exclusive of any gifts in kind which have been received.

I wish to take this opportunity to express my appreciation of the valuable services rendered by the Care Committees, and to the Joint Council of the Order of St. John and The Red Cross for placing at our disposal the services of their organisation.

### **CENTRAL STAFF.**

#### **Chief Clinical Tuberculosis Officer:**

Graham S. Johnston, M.D., D.P.H., Ed.

#### **Sanatorium Staff.**

##### **Institution.**

Middleton	...	...	Thompson Campbell, M.D. H. A. Crowther, B.A., M.R.C.S., L.R.C.P. (resigned Mar., 1923). H. L. Coulthard, M.D., D.P.H. (resigned April, 1923). S. N. Galbraith, M.B., B.Ch., D.P.H. (resigned July, 1923). D. M. Smith, M.B., B.Ch. Jas. Menzies, M.B., B.S. (resigned December, 1923).
Cardigan	...	...	Graham S. Johnston, M.D., D.P.H., Ed. (Chief Clinical Tuberculosis Officer).
Eldwick	...	...	Margaret S. Sharpe, M.B., B.S.
Mitchell Memorial Home			W. W. Chamberlain, M.B., C.M.* H. B. Sproat, M.D. (from 1st September, 1923).

\* Deceased.

**TABLE XI (a).**  
**No. of New Applicants for Treatment in 1923.**  
 (Indicating the form of Treatment recommended.)

Treatment granted.																				
	Dispensary.				Sanatorium.				Hospital.				Domiciliary.				Totals.			
	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.
Males	399	146	26	149	379	257	20	20	1	6	74	7	4	11	38	9	783	420	158	185
Females	349	92	23	115	234	168	16	24	3	7	70	11	—	5	31	3	586	272	140	158
Totals	748	238	49	264	613	425	36	44	4	13	144	18	4	16	69	17	1369	692	298	343



TABLE XI (b).  
Age Classification of New Applicants for Treatment, 1923.

	Ages 1-15.				Ages 15 and under 30.				Ages 30 and under 55.				Ages 55 and over.				All ages.			
	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.	Class I.	Class II.	Class III.	Non-Pulm.
Males ...	422	100	18	157	222	130	54	18	127	169	70	10	12	21	16	—	783	420	158	185
Females ...	371	96	27	135	147	115	76	18	68	57	37	5	—	4	—	—	586	272	140	158
Totals ...	793	196	45	292	369	245	130	36	195	226	107	15	12	25	16	—	1369	692	298	343

**TABLE XI (c).**

**Shewing the Number of Cases Reconsidered for Treatment  
during 1923.**

	Males.	Females.	Total.
For Dispensary Treatment	26	18	44
For Sanatorium Treatment	270	152	422
For Hospital Treatment	71	25	96
For Domiciliary Treatment	113	33	146
Totals	480	228	708



Analysis of New Cases examined at West Riding Dispensaries during 1923.

NEW PATIENTS EXAMINED.																																							
Dispensary or Branch.	CONTACTS.								OTHER CASES (Including Form "A").																														
	Pulmonary.				Non-Pulmonary.				Non-Tuberculous.				Pulmonary.				Non-Pulmonary.				Non-Tuberculous.																		
	Civilian.		Ex-Ser-vice.		Civilian.		Ex-Ser-vice.		Civilian.		Ex-Ser-vice.		Civilian.		Ex-Ser-vice.		Civilian.		Ex-Ser-vice.		Civilian.		Ex-Ser-vice.																
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.															
Wunsley	85	50	2		9	3	1		43	36			105	80	9		14	14	65	64			5																
Penistone	6	3	1		4	4			6	4	1		11	7	4		4	4	10	2																			
South Kirkby	13	13	3		3	4		2	8	12	2		28	19	12		6	3	16	19			4																
Wesbury	8	10							1	3			19	8	2																								
Pudsey	4	4							1	1			7	4	4																								
Birstall	1	2								1			2	2																									
Liversedge	2	1											19	10	3																								
Morley	4	6								1			13	18																									
Doncaster	27	34			3	6		1	22	12			104	77	20		22	13	20	16			7																
Goole	10	12			3	5		2	5	15	2		26	25	3		11	2	4	4			1																
Thorne	1	2			3	1				7			4	6	6		1	1																					
Wetherfield		2			1	1			1	2			26	22	18		32	34	6	7			1																
Uppermill					2	4							6	13	4		11	12																					
Marsden										1			6	4	1		11	14																					
Holmfirth					2				2				8	1	2		14	10																					
Wighley	5	7				2		1	9	10			25	23	8		2	8	19	26			4																
Skipton		1			1	1			3	5			3	7	2		1	1	3	5			2																
Barnoldswick	1	3			1	1		1	4	7			6	13	2		1	3	11	8			6																
Wetherley	1								13	12			6	5	7		2	3																					
Guiseley									13	12			7	7	3					3			1																
Harrogate		1				3			49	29			16	7	8		5	7		2																			
Shipley	1	3							19	22			12	22	4		2	1		1			1																
Montefract	44	51	3		3	3		1	16	28			165	127	50		8	4	2	2			1																
Tadcaster	2	1												8	1		2	1																					
Normanton	14	14	1					1	7	4			24	23	12		1			2																			
Selby	7	9	1						1	4			6	17	3		1		1																				
Wetherham	11	10			2				2	3			41	34	13		8		10	11			2																
Mexborough	22	24	2		10	7		3	16	27			77	106	17		21	13	23	31			4																
Wetherby Bridge	19	33			1				5	4			35	50	7		8	5		1			1																
Todmorden	6	16							2	3			8	17	6		2	2	1	1																			
Brighouse	8	17											15	12	2				1																				
Wadsley Bridge	3	4			2				10	13			12	11	5		14	4	18	16																			
Dinnington	1	3			1	3			3	12			13	16	3		6	4	9	4																			
Stocksbridge									1	2			5	5			2	1	6	7																			
Wakefield	20	18	1		18	20			10	11			58	55	15		19	21	18	10			2																
Hemsworth	16	11	4		4	9		2	3	3			35	34	13		15	10	7	11			3																
Total	342	365	18		73	77	1	15	275	306			953	895	269		243	205	250	253			45																
																475				2119				596				151				725				548			





## DISPENSARY AND DOMICILIARY TREATMENT, 1923.

Dispensary or Branch.	No. of Patients under Dispensary Treatment during 1923.				No. of Patients under Dispensary Treatment on 31/12/23.				No. of Persons placed under observation for the purpose of diagnosis during 1923.				Observation cases where the period of observation exceeded 2 months.				Cases of doubtful diagnosis under observation on 31/12/23.				No. of Patients under Domiciliary Treatment during 1923.				No. of Patients under Domiciliary Treatment on 31/12/23.			
	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.	Adult Males (Civilians).	Ex-Ser-vice Men.	Women	Child-ren under 15.
<b>Barnsley</b>	141	126	123	376	122	116	116	375	1	—	—	2	1	—	—	2	1	—	—	2	2	3	2	4	2	1	1	4
South Kirkby ...	44	43	27	64	43	43	25	63	2	—	—	4	2	—	—	4	2	—	—	4	3	1	1	—	1	1	—	1
Penistone ...	11	7	15	46	10	7	13	44	1	—	1	1	1	—	—	1	—	—	—	1	3	1	1	1	—	—	1	1
<b>Dewsbury</b>	18	41	26	71	10	27	18	61	2	6	8	7	—	2	5	2	2	4	3	5	2	1	—	—	1	—	1	—
Pudsey ...	12	22	22	16	10	22	19	14	1	3	2	2	1	—	1	5	—	3	1	5	3	—	1	—	—	1	—	—
Birstall ...	2	7	1	4	2	7	1	4	3	1	1	8	—	1	—	7	3	1	—	3	1	1	4	1	—	1	2	1
Liversedge ...	11	30	14	29	8	21	11	22	1	1	1	13	—	—	1	7	—	1	—	2	2	3	4	—	1	1	1	—
Morley ...	7	27	23	52	6	27	18	52	3	2	4	24	2	—	2	16	1	—	2	8	4	2	4	—	1	—	2	—
<b>Doncaster</b>	130	166	149	478	77	154	86	364	8	1	2	12	1	—	1	2	1	—	1	2	16	15	19	13	3	8	8	6
Goole ...	13	33	32	163	13	27	30	142	2	—	1	8	—	—	—	2	—	—	—	—	3	4	12	6	—	1	6	3
Thorne ...	14	17	18	53	14	14	17	43	—	—	1	2	—	—	—	—	—	—	—	—	1	1	—	3	—	—	—	1
<b>Huddersfield</b>	68	83	106	337	54	73	90	253	—	1	1	7	—	1	—	—	—	—	—	—	5	4	6	—	1	2	1	—
Uppermill ...	25	25	57	138	18	19	38	110	1	—	1	1	—	—	—	—	—	—	—	—	—	2	4	—	—	1	—	—
Marsden ...	16	15	28	169	7	10	13	129	—	2	—	4	—	—	—	—	—	—	—	—	1	3	1	1	—	1	1	—
Holmfirth ...	15	12	25	97	12	10	23	84	1	—	1	3	—	1	—	—	—	—	—	—	2	—	—	—	1	—	—	—
<b>Keighley</b>	27	60	53	67	19	52	39	59	7	2	8	8	2	—	5	3	—	—	—	—	12	7	19	2	7	1	6	—
Skipton ...	6	23	16	15	4	21	15	14	2	—	7	3	1	—	1	1	—	—	1	—	6	6	8	—	3	3	3	—
Barnoldswick ...	17	26	20	18	11	22	13	12	5	1	1	1	—	—	1	1	1	—	—	—	3	5	5	—	1	3	2	—
<b>Otley</b>	9	17	18	13	6	11	12	11	2	3	3	4	—	—	1	2	—	—	—	—	—	—	—	—	—	—	—	—
Harrogate ...	18	37	33	41	14	32	27	34	4	7	5	15	1	2	1	6	—	2	1	5	1	2	—	—	—	1	—	—
Guiselley ...	10	16	14	8	6	11	12	4	2	6	2	7	—	2	—	3	—	—	1	3	—	—	—	—	—	—	—	—
Shipley ...	15	25	41	22	10	19	28	16	6	5	5	9	2	—	2	5	1	1	—	3	—	—	—	—	—	—	—	—
<b>Pontefract</b>	193	215	112	497	164	185	93	378	23	13	10	105	5	3	2	57	3	2	1	55	34	45	27	11	16	36	9	2
Normanton ...	27	67	25	82	22	62	20	74	3	4	2	19	1	2	—	13	—	1	—	7	—	—	—	—	—	—	—	—
Selby ...	16	35	21	69	12	31	14	56	—	1	1	9	—	—	—	4	—	—	—	3	3	6	2	1	1	2	1	—
Tadcaster ...	4	25	6	29	2	14	4	17	—	1	—	6	—	1	—	4	—	1	—	2	1	7	—	—	1	6	—	—
<b>Rotherham</b>	48	70	35	140	27	44	30	118	4	2	3	5	1	1	1	1	—	1	1	1	4	5	4	1	1	2	1	1
Mexborough ...	69	85	104	333	52	63	76	305	4	7	11	35	—	1	2	17	1	2	1	17	11	9	3	6	7	4	1	3
<b>Sowerby Bridge</b>	23	28	40	137	16	23	27	93	—	1	—	9	—	—	—	4	1	—	—	4	3	8	3	1	—	5	2	—
Todmorden ...	21	18	38	82	14	10	21	51	2	1	—	3	—	—	—	—	1	—	2	—	4	1	3	—	2	—	—	—
Brighouse ...	11	17	18	103	7	12	11	71	—	—	—	2	—	—	—	2	—	—	—	—	—	4	4	1	—	1	1	—
<b>Wadsley Bridge</b>	49	21	26	86	33	12	20	74	14	—	4	32	4	—	1	6	9	—	3	12	2	1	1	—	3	6	2	—
Dinnington ...	15	12	21	81	10	8	14	60	—	—	—	9	—	—	1	1	—	—	—	8	5	1	3	—	3	1	2	—
<b>Wakefield</b>	51	83	61	227	51	83	52	225	3	—	3	12	1	—	1	2	1	—	3	8	8	2	4	—	3	1	—	—
Hemsworth ...	23	64	36	159	22	63	35	158	16	10	8	25	—	2	2	6	4	5	6	19	—	—	1	—	—	—	1	—
<b>Totals</b> ...	1179	1598	1404	4301	908	1355	1021	3590	123	81	97	416	26	19	31	186	32	24	27	159	145	150	146	52	60	90	59	22





# LIST OF TUBERCULOSIS DISPENSARY AREAS, SHEWING DISPENSARY ADDRESSES, AND TIMES OF SESSIONS.

Situation of Central Dispensary or Branch.	Day and Time of Session.	Sanitary Districts included in area.	District Tuberculosis Officer.
Open-air School, Queen's Road, Barnsley	Wednesdays, 10 a.m. and 2 p.m.; Thursdays, 6 p.m.; Fridays and Saturdays, 10 a.m.	<i>Urban:</i> Cudworth, Darfield, Darton, Dodworth, Gunthwaite and Ingthorpe, Hoyland Nether, Hoylandswaine, Penistone, Royston, Thurlstone, Wombwell and Worsborough.	Walter C. Rivers, M.R.C.S., L.R.C.P., D.P.H.
Wesleyan Sunday School, Penistone The Green, South Kirkby	Thursday, 10.30 a.m. Tuesdays, 10.15 a.m.	<i>Rural:</i> Barnsley, Hemsworth (part of), Penistone and Wortley (part of).	
Northfield House, Halifax Road, Dewsbury	Mondays, 2 p.m.; Thursdays, 2 and 6 p.m.; Saturdays, 10 a.m.	<i>Urban:</i> Batley Borough, Birkenshaw, Birstall, Calverley, Drighlington, Farsley, Gildersome, Heckmondwike, Hemsworth, Morley Borough, Pudsey Borough, and Spensborough.	E. J. C. Groves, M.B., Ch.B.
Town Hall, Manor House Street, Pudsey	Tuesdays, 2 p.m.		
Cyclist's Rest, Millbridge, Liversedge Council Offices, Birstall	Fridays, 10 a.m.		
Union Bank Chambers, Queen Street, Morley	Tuesdays, 10 a.m. Mondays and Thursdays, 10 a.m.		
Merton House, Christchurch Road, Doncaster	Mondays, 2 and 7 p.m.; Thursdays, 10 a.m.; Saturdays, 10 a.m.	<i>Urban:</i> Adwick-le-Street, Bentley-with-Arksey, Conisborough (less Denaby Main), Doncaster Borough, Goole, Tickhill.	Alexander Leitch, M.B., Ch.B., D.P.H.
7, Belgraveia, Goole	Tuesdays, 3 p.m. Fridays, 3 p.m.	<i>Rural:</i> Doncaster (less Denaby and Adwick-on-Dearne), Goole, Thorne.	
21, Ellison Street, Thorne			
18, Ramsden Street, Huddersfield	Tuesdays, 2 p.m.; Fridays, 2 and 7 p.m.	<i>Urban:</i> Clayton West, Denby and Cumberworth, Farnley Tyas, Golcar, Holme, Holmfirth, Honley, Kirkburton, Kirkheaton, Lepton, Linthwaite, Marsden, Meltham, Mirfield, New Mill, Saddleworth, Shelley, Shepley, Skelmanthorpe, Slaithwaite, South Crosland, Springhead, Thurstonsland, and Whitley Upper.	John E. Gething, M.B., Ch.B., B.A.
Mrs. Kenworthy, Court Street, Upper-mill	Mondays, 10 a.m.; Thursdays, 10 a.m.		
98, Huddersfield Road, Holmfirth	Wednesdays, 3 p.m.		
Russell's Shop, Marsden	Mondays and Thursdays, 3 p.m.		
143, Skipton Road, Keighley	Tuesdays, 2 p.m.; Fridays, 2 and 7 p.m.	<i>Urban:</i> Barnoldswick, Clayton, Denholme, Earby, Haworth, Keighley Borough, Oakworth, Oxenhope, Queensbury, Silsden, and Skipton.	E. Allan Wilson, M.D., M.R.C.S., L.R.C.P.
Friendly Societies' Hall, Sheep Street, Skipton	Wednesdays, 10 a.m.; Thursdays, 7 p.m.	<i>Rural:</i> Bowland, Keighley, Sedburgh, Settle and Skipton.	
2, Manchester Road, Barnoldswick	Tuesdays, 11 a.m. and 1.30 p.m.		
Whiteley Croft, off Station Road, Otley	Fridays, 10 a.m.	<i>Urban:</i> Baildon, Bingley, Burley-in-Wharfedale, Guiseley, Harrogate Borough, Horsforth, Ilkley, Knaresborough, Otley, Rawdon, Ripon City, Shipley and Yeadon.	Gerrard A. Crowley, M.D., D.P.H., B.A.
1a, Kirkgate, Shipley	Wednesdays, 1.30 p.m.	<i>Rural:</i> Great Ouseburn, Knaresborough, Pateley Bridge, Ripon, Wetherby, and Wharfedale.	
Kidson's Auction Room, Station Bridge, Harrogate	Mondays, 2 p.m.; Thursdays, 2 p.m.		
Drill Hall, Victoria Road, Guiseley	Fridays, 2 p.m.		
The Lindens, Linden Terrace, Tan-shelf, Pontefract	Tuesdays, 2 p.m.; Fridays, 2 and 6.30 p.m.	<i>Urban:</i> Altofts, Castleford, Featherstone, Garforth, Knottingley, Methley, Normanton, Pontefract Borough, Selby and Whitwood.	Thos. W. Rutledge, M.B., Ch.B., D.P.H.
The Park Pavilion, Normanton	Tuesdays, 10.30 a.m.	<i>Rural:</i> Bishopthorpe, Pontefract, Selby and Tadcaster.	
Child Welfare Centre, Westgate, Tadcaster	First and Third Thursdays each month, 10.30 a.m.		
c/o Appleton, Chemist, Finkle Street, Selby	Tuesdays, 2 p.m.; Fridays, 2 and 6.30 p.m.		
Carnson House, Moorgate Street, Rotherham	Tuesdays, 10.30 a.m.	<i>Urban:</i> Bolton-on-Dearne, Greasborough, Maltby, Mexborough, Rawmarsh, Swinton, Thurnscoe, Wath-on-Dearne, Conisborough (Denaby Main only).	Robert M. Fenn, M.B., C.M.
Exchange Buildings, Market Street, Mexborough	Fridays, 10 a.m. and 3 p.m.; Saturdays, 10 a.m.	<i>Rural:</i> Doncaster (Denaby and Adwick-on-Dearne only), Rotherham.	
Mondays, 10 a.m.; Wednesdays, 10 a.m. and 3 p.m.			
The Hut, Allan Park, Sowerby Bridge	Tuesdays, 10 a.m.; Thursdays, 2.30 p.m.; Saturdays, 10 a.m.	<i>Urban:</i> Barkisland, Brighouse Borough, Elland, Greetland, Hebden Bridge, Hipperholme, Luddendenfoot, Midgley, Mytholmroyd, Rishworth, Scammonden, Shelf, Southowram, Sowerby, Sowerby Bridge, Soyland, Stainland, Todmorden Borough.	George M. B. Liddle, M.B., Ch.B., F.R.C.S. (Ed.), D.P.H.
Masonic Hall, Todmorden	Tuesdays and Fridays, 2 p.m.	<i>Rural:</i> Halifax and Todmorden.	
Old Mechanics' Institute, Brighouse	Thursdays, 10 a.m.		
90, Parson Cross Road, Wadsley Bridge	Thursdays, 2 p.m.	<i>Urban:</i> Stocksbridge.	Samuel Bryson, M.B., Ch.B.
Middleton Institute, Dinnington Council Offices, Stocksbridge	Tuesdays, 10.30 a.m. Last Monday in each month, 3 p.m.	<i>Rural:</i> Kiveton Park, Wortley (part of).	
5, Almshouse Lane, Wakefield	Tuesdays, 2 p.m.; Fridays, 2 and 7 p.m.	<i>Urban:</i> Ardsley E. and W., Emley, Flockton, Hemsworth, Horbury, Ossett Borough, Rothwell, and Stanley.	Henry Blyth, M.B., Ch.B., D.P.H.
The Rectory Club, Hemsworth	Ex-service Men, Wednesdays, 9.30 a.m. Mondays and Thursdays, 1.30 p.m.	<i>Rural:</i> Hemsworth (part of), Hunslet and Wakefield.	







## APPENDIX.

### Public Health Legislation, etc., during 1923.

#### I.—Orders, Circulars, and Memoranda issued by the Ministry of Health.

Circular  
Number.

#### General.

- 366—Encephalitis Lethargica (reports on cases); Cerebro-Spinal Fluid (examination of).
- 374—Rats and Mice Destruction, Transfer of Powers Order, 1922.
- 77/Foods—Sale of Milk under Special Designations.
- 381—Boric Acid in Cake.
- 327 & Order } Canal Boats Order, 1922.
- 393, 446 } Condensed Milk Regulations, 1923; also Condensed Milk Regu-  
& Regns. } lations (No. 2), 1923.
- 399—Milk deficient in fat—prosecutions.
- 408 & Order } Milk (Special Designations) Order, 1923.
- 422—Smallpox (precautions, Annual Training Camps of Territorial Army).
- 424—Administration of Vaccination Acts; Vaccination Order, 1923.
- 427—Smallpox in Casual Wards and Poor Law Institutions.
- 426—Cancer.
- 437—Suspected Cases of Plague and Cholera.
- 452 & Regns. } Dried Milk Regulations, 1923.
- 462—Sale of Food and Drugs Acts; Milk and Cream Regulations, 1912 and 1917.

#### Treatment of Tuberculosis.

- 371 } Vocational Training of ex-Service Men.  
83/T }
- 78/T—Monthly Return of Cases receiving or awaiting Residential Treatment.
- 395—Tuberculous ex-Service Men.
- 425—Notification of Tuberculosis (circular to Medical Practitioners).
- 465—After-Care of Tuberculous Patients.
- 466—Co-ordination of Work of Tuberculosis Officers and Insurance Practitioners. (Memo. 286.)

**Housing and Town Planning.**

368—Town Planning (General Interim Development) Order, 1922

388—Housing, etc., Bill, 1923.

388a        }  
461        } Housing, etc., Act, 1923.

—Housing Acts (Forms of Orders and Notices) Order, 1923.

—County Councils (Assisted Schemes for the Housing of Employees)  
Amendment Regulations, 1924.

**II.—Acts of Parliament.**

Housing, etc., Act, 1923.



No. I. Births, Deaths, Annual Rates, etc., 1923.

SANTARY DISTRICT.	AREA (Acres).	ESTIMATED POPULATION (Middle 1923).	BIRTHS (Nett).	NETT DEATHS at ALL AGES.	Annual Rates per thousand of Estimated Population.					Rate of Infant Mortality (Deaths under 1 year per 1,000 Births).
					Birth Rate.	Nett Death Rate.	Zymotic Death Rate.	Phthisis Death Rate.	Respiratory Death Rate.	
1	2	3	4	5	6	7	8	9	10	11
I. URBAN.										
Adwick-le-Street ... ..	3605	13420	440	138	32.8	10.3	1.86	0.52	2.23	82
Allofts ... ..	1838	5214	117	47	22.4	9.0	1.15	0.38	1.34	77
Ardley, East and West ... ..	4017	8745	193	94	22.1	10.7	0.34	0.69	1.37	67
Baildon ... ..	2606	6627	104	84	15.7	12.7	0.30	0.91	1.21	58
Barkisland ... ..	2424	1692	28	13	17.5	8.1	—	—	1.25	—
Barnoldswick ... ..	2764	12347†	184	116	14.9	9.4	—	0.57	1.30	60
Batley M.B. ... ..	3227	36930	708	496	19.2	13.4	0.46	0.49	2.98	85
Bentley-with-Arksey ... ..	5128	14010	377	143	26.9	10.2	0.71	0.86	2.21	74
Bingley ... ..	11675	19320	316	247	16.4	12.8	0.36	1.09	1.29	70
Birkenshaw ... ..	924	2721	41	34	15.1	12.5	—	—	2.57	49
Birstal ... ..	1234	7255	134	84	18.5	11.6	—	0.55	2.89	75
Bolton-upon-Dearne ... ..	2325	13190	453	127	34.3	9.6	0.76	0.45	1.90	99
Brighouse M.B. ... ..	2231	20390	285	272	14.0	13.3	0.34	1.03	2.30	56
Burley-in-Wharfedale ... ..	3136	3832	53	35	13.8	9.1	0.52	0.78	0.78	57
Calverley ... ..	2106	3386	31	46	9.2	13.6	—	—	0.30	32
Castleford ... ..	564	24790	549	342	22.1	13.8	1.41	1.05	3.27	91
Clayton ... ..	1462	5125	78	63	15.2	12.3	—	0.78	2.73	90
Clayton West ... ..	1142	2028	26	21	12.8	10.4	—	—	0.49	—
Conisborough ... ..	1593	16690	562	228	33.7	13.7	2.22	1.20	3.65	107
Cudworth ... ..	1746	8180	260	93	31.8	11.4	0.73	0.86	1.83	77
Darfield ... ..	2018	5736	142	64	24.8	11.2	0.35	1.05	1.92	92
Darton ... ..	4361	11690	320	142	27.4	12.1	0.43	0.86	2.39	78
Denby and Cumberworth ... ..	4302	3669	58	44	15.8	12.0	1.09	0.55	1.36	86
Denholme ... ..	2536	3030	48	49	15.8	16.2	—	0.66	2.31	42
Dodworth ... ..	1917	3484	93	35	26.7	10.0	—	0.57	1.72	86
Doncaster M.B. ... ..	4831	55220	1155	677	20.9	12.3	0.62	0.63	2.23	81
Drighlington ... ..	1135	4159	90	56	21.6	13.5	—	1.20	2.64	44
Earby ... ..	3519	5995	96	66	16.0	11.0	0.17	1.33	1.67	52
Elland ... ..	1994	10700	151	139	14.1	13.0	0.28	1.03	2.62	106
Emley ... ..	3556	1747	33	13	18.9	7.4	—	0.57	0.57	91
Farnley Tyas ... ..	1784	487	14	5	28.7	10.3	—	2.05	4.11	—
Farsley ... ..	821	6134	80	76	13.0	12.4	0.33	0.65	2.45	75
Featherstone ... ..	4431	15470	373	199	24.1	12.9	0.58	0.52	3.10	99
Floekton ... ..	1108	1424	28	15	19.7	10.5	—	1.40	1.40	—
Garforth ... ..	1519	3950	75	44	19.0	11.1	0.51	0.76	1.77	27
Gildersome ... ..	992	2895	43	34	14.9	11.7	0.35	0.69	2.07	47
Golear ... ..	1267	10490	156	134	14.9	12.8	0.29	0.76	1.62	71
Goole ... ..	1953	19810	512	256	25.8	12.9	0.71	0.91	1.82	90
Greasbrough ... ..	2413	3232	69	43	21.3	13.3	0.93	0.31	3.40	58
Greetland ... ..	626	4353	48	56	11.0	12.9	—	0.69	1.38	63
Guiseley ... ..	1555	5414	96	58	17.7	10.7	—	0.18	2.95	94
Gunthwaite and Ingbyrehworth ... ..	2057	321	9	7	28.0	21.8	3.12	—	3.12	111
Harrogate M.B. ... ..	3277	34280	480	364	14.0	10.6	0.09	0.67	1.46	62
Haworth ... ..	2337	6596	79	83	12.0	12.6	0.45	1.21	1.82	101
Hebden Bridge ... ..	476	6507	78	90	12.0	13.8	0.31	0.46	2.31	64
Heckmondwike ... ..	696	9087	144	99	15.8	10.9	0.33	0.66	1.43	76
Hensworth ... ..	4163	12020	403	156	33.5	13.0	1.16	0.58	2.83	84
Hipperholme ... ..	1196	4759	62	69	13.0	14.5	0.84	1.68	1.89	65
Holme ... ..	3464	346	9	6	26.0	17.3	—	2.89	—	111
Holmfirth ... ..	8493	10550	160	128	15.2	12.1	0.19	0.85	1.42	38
Honley ... ..	1890	4722	49	50	10.4	10.6	—	0.85	1.27	41
Horbury ... ..	1280	8035	154	113	19.2	14.1	—	1.12	1.37	143
Horsforth ... ..	2800	9638	140	129	14.5	13.4	0.21	0.93	2.70	50
Hoyland and Nether ... ..	2087	15740	382	175	24.3	11.1	0.83	0.83	3.00	76
Hoylandswaine ... ..	2026	697	14	5	20.1	7.2	—	—	—	—
Hunsworth ... ..	1381	1322	24	14	18.2	10.6	—	—	3.03	83
Ikley ... ..	3816	8555	103	104	12.0	12.2	0.12	0.70	1.40	68
Keighley M.B. ... ..	3902	42170	678	579	16.1	13.7	0.43	1.19	2.35	117
Kirkburton ... ..	1289	3476	52	44	15.0	12.7	0.58	0.58	0.86	58
Kirkheaton ... ..	1674	2743	55	42	20.1	15.3	—	1.09	2.19	91
Knarsborough ... ..	609	5350	100	95	18.7	17.8	0.37	0.37	2.43	110
Knottingley ... ..	1484	6997	194	92	27.7	13.1	1.00	0.86	1.29	93
Lepton ... ..	1862	3236	47	33	14.5	10.2	0.31	0.61	0.92	21
Linthwaite ... ..	1323	9893	153	116	15.9	11.7	0.10	0.91	1.42	78
Luddenden Foot ... ..	765	2869	54	33	18.8	11.5	—	0.70	2.09	74
Marsden ... ..	8633	5972	105	68	17.6	11.4	0.17	1.67	1.51	19
Meltham ... ..	5134	5057	89	72	17.6	14.2	0.59	0.79	2.37	56
Methley ... ..	3493	4563	88	49	19.3	10.7	0.22	0.66	1.53	102
Mexborough ... ..	1292	16080	398	209	24.8	13.0	0.75	1.06	3.98	118
Midgley ... ..	2183	1965	19	31	9.7	15.8	—	0.51	3.05	53
Mirfield ... ..	3394	12410	237	166	19.1	13.4	0.16	0.48	2.10	80
Morley M.B. ... ..	3385	24180	451	317	18.7	13.1	0.83	0.66	1.82	75
Mytholmroyd ... ..	6608	4180	49	74	11.7	17.7	0.24			













No. III. Notified Cases of Infectious Diseases, 1923.

CASES NOTIFIED OR OTHERWISE ASCERTAINED.										CASES REMOVED TO HOSPITAL.					MEDICAL OFFICER OF HEALTH.													
Small-pox.	Scarlet Fever.	Diphtheria and Membranous Croup.	Enteric Fever, etc.	Pneumonia (acute primary) and Influenza.	Cholera, Plague, Puerperal Fever.	Cerebro-Spinal Fever.	Acute Poliomyelitis.	Acute Encephalitis.	Encephalitis Lethargica.	Typhus Fever.	Relapsing Fever, continued Fever.	Ophthalmia Neonatorum.	Erysipelas.	Respiratory Tuberculosis.		Other forms of Tuberculosis.	Malaria contracted abroad.	Malaria contracted in this country.	Chicken-pox.	Measles.	Whooping Cough.	Small-pox.	Diphtheria.	Scarlet Fever.	Enteric Fever.	Other.		
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
I. URBAN.																												
Adwick-le-Street	30	14	71	1	28	1	2	2	6	3	3	8	3	6	3	8	3	..	..	..	x	..	..	30	65	14	1	A. B. Dunne.
Altofts	..	18	11	4	34	1	1	..	..	..	..	..	..	..	..	3	5	4	..	..	..	..	..	..	18	4	1	H. Scholefield.
Ardsley, East & West	..	3	7	..	15	1	..	..	..	..	..	..	..	..	..	3	12	2	..	..	..	x	..	..	7	3	1	B. G. Ewing.
Baildon	..	27	6	..	..	..	..	..	..	..	..	..	..	..	..	6	3	..	..	..	..	..	..	..	6	25	..	E. G. Firth.
Barkisland	..	7	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	26	..	..	J. Hoyle.
Barnoldswick	..	26	4	..	11	..	..	..	..	..	..	..	..	..	..	7	15	8	..	..	..	..	..	..	14	123	7	H. C. Alderton.
Batley Borough	..	124	18	4	47	..	..	..	..	..	..	..	..	..	..	9	63	8	1	..	..	..	..	..	39	8	..	G. H. Pearce.
Bentley-with-Arksey	77	50	48	2	39	1	..	..	..	..	..	..	..	..	..	20	29	21	4	..	..	x	..	..	35	3	2	A. B. Dunne.
Bingley	..	44	43	..	5	..	..	..	..	..	..	..	..	..	..	3	29	21	..	..	..	..	..	..	17	..	..	H. Angus.
Birkenshaw	..	17	..	..	39	1	..	..	..	..	..	..	..	..	..	2	8	2	..	..	..	..	..	..	24	1	..	J. Barelay.
Birstall	..	24	7	1	5	..	..	..	..	..	..	..	..	..	..	..	8	2	..	..	..	..	..	..	7	..	..	A. Dick.
Bolton-upon-Deane	..	53	15	18	14	1	..	..	..	..	..	..	..	..	..	2	65	11	..	..	..	..	..	..	12	49	18	J. W. K. Morris.
Brighouse Borough	..	71	6	1	9	1	..	..	..	..	..	..	..	..	..	5	15	9	..	..	..	..	..	..	63	1	..	F. A. Belam.
Burley-in-Wharfedale	..	4	5	..	2	..	..	..	..	..	..	..	..	..	..	1	2	1	..	..	..	..	..	..	4	..	..	H. Hebblethwaite.
Calverley	..	4	..	..	2	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	10	109	3	N. Hughes.
Castleford	..	148	11	3	4	..	..	..	..	..	..	..	..	..	..	13	7	10	..	..	..	..	..	..	7	1	..	W. Kemp.
Clayton	..	7	2	1	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	1	..	..	H. Stansfield.
Clayton West	..	2	2	..	3	..	..	..	..	..	..	..	..	..	..	3	51	6	..	..	..	..	..	..	18	84	2	R. N. Farrer.
Conisborough	..	105	26	2	20	..	..	..	..	..	..	..	..	..	..	12	21	5	..	..	..	..	..	..	26	22	1	J. McArthur.
Cudworth	..	24	7	3	67	1	..	..	..	..	..	..	..	..	..	8	24	5	..	..	..	..	..	..	7	13	3	J. L. Elliott.
Darfield	..	13	7	3	67	1	..	..	..	..	..	..	..	..	..	7	16	3	..	..	..	..	..	..	3	17	..	R. F. Castle.
Darton	..	26	4	1	23	..	..	..	..	..	..	..	..	..	..	4	4	1	..	..	..	..	..	..	7	2	1	R. Millar.
Denby & Cumberworth	..	2	7	1	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	3	1	..	R. R. Archibald.
Denholme	..	8	2	..	..	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	A. E. Tunstall.
Dodworth	..	16	2	..	6	..	..	..	..	..	..	..	..	..	..	4	4	..	..	..	..	..	..	..	3	..	..	A. E. White.
Doncaster Borough	..	145	81	5	51	2	..	..	..	..	..	..	..	..	..	16	60	7	1	..	..	..	..	..	126	5	..	D. L. Anderson.
Drighlington	..	2	2	..	15	..	..	..	..	..	..	..	..	..	..	1	15	7	2	..	..	..	..	..	2	1	..	A. G. Webster.
Earby	..	6	8	1	10	..	..	..	..	..	..	..	..	..	..	3	4	..	..	..	..	..	..	..	3	..	..	A. M. Erskine.
Elland	..	8	4	1	18	..	..	..	..	..	..	..	..	..	..	12	14	8	..	..	..	..	..	..	..	..	..	E. B. Jago.
Emley	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	W. H. Cheetham.
Farnley Tyas	..	10	4	1	1	..	..	..	..	..	..	..	..	..	..	..	6	1	..	..	..	..	..	..	10	1	..	J. C. P. Beatty.
Farsley	..	54	6	3	28	1	..	..	..	..	..	..	..	..	..	2	58	7	..	..	..	..	..	..	4	54	2	F. S. B. Fletcher.
Featherstone	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	..	..	W. Steven.
Flockton	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	J. A. Smith.
Garforth	..	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	J. S. B. Fletcher.
Gildersome	..	4	1	3	8	..	..	..	..	..	..	..	..	..	..	2	4	3	..	..	..	..	..	..	..	..	..	J. R. Lambert.
Golar	..	1	4	..	..	..	..	..	..	..	..	..	..	..	..	3	4	3	..	..	..	..	..	..	..	..	..	W. Steven.
Goole	..	64	41	1	28	..	..	..	..	..	..	..	..	..	..	67	19	..	..	..	..	..	..	..	57	4	..	J. A. Smith.
Greasbrough	..	3	3	1	1	..	..	..	..	..	..	..	..	..	..	3	5	..	..	..	..	..	..	..	2	..	..	E. P. Pickersgill.
Greetland	..	2	..	..	2	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	3	..	W. H. Holliday.
Guiseley	..	7	..	..	5	..	..	..	..	..	..	..	..	..	..	2	7	3	..	..	..	..	..	..	39	..	..	A. G. Webster.
Gunthwaite-and-Ing.	..	31	16	6	51	1	..	..	..	..	..	..	..	..	..	3	6	..	..	..	..	..	..	..	2	..	..	E. B. Jago.
Harrogate Borough	..	20	2	..	..	..	..	..	..	..	..	..	..	..	..													





Results of Visits by the Health Visitors in those districts where the County Council carry out the duties under the Notification of Births Act, 1907, during 1923.

TABLE IV.

Sanitary District.	Nett Births.	No. of Births Notified (including Still-Births).	No. of First Visits.	No. of Re-Visits.	No. of Pre-Natal Visits.	No. of Special Visits (Epidemic Diarrhoea, etc.).	No. of Still-Births Notified.	No. of Deaths under one year.	Measles Cases Visited.	No. of Attendances at Infant Welfare Centres.	
										Mothers.	Infants.
1	2	3	4	5	6	7	8	9	10	11	12
I. URBAN.											
Adwick-le-Street ...	440	409	422	2123	35	69	13	36	10	2619	2706
Altofts ...	117	110	92	1262	237	11	6	9	183	—	—
Ardsley, East & West ...	193	172	185	1736	40	18	4	13	18	1554	1780
Baildon ...	104	85	89	465	8	28	5	6	91	675	670
Barkisland ...	28	24	21	480	29	62	—	—	7	—	—
Barnoldswick ...	184	190	193	2209	61	28	14	11	—	—	—
Batley Boro* ...	708	—	—	—	18	63	12	28	—	1822	2055
Bentley-with-Arksey ...	377	356	346	1876	18	—	—	22	—	—	—
Bingley* ...	316	—	—	—	10	9	—	2	9	—	—
Birkenshaw ...	41	41	39	1185	41	10	5	10	—	—	—
Birstal ...	134	124	146	1753	—	—	—	16	—	—	—
Bolton-on-Deane* ...	453	—	—	—	8	—	1	3	—	—	—
Brighouse Boro* ...	285	33	42	440	5	—	3	50	—	—	—
Burley-in-Wharfedale ...	53	34	33	766	—	—	7	7	—	283	236
Calverley ...	549	85	73	1023	52	—	1	—	—	1002	926
Clayton ...	78	25	23	682	—	—	14	60	—	1083	1093
Clayton West ...	26	542	554	2973	82	4	9	20	—	998	849
Conisborough ...	562	267	282	1451	27	2	13	15	2	2093	1888
Cudworth ...	260	137	125	1959	105	113	4	23	2	—	—
Darfield ...	142	329	318	3114	358	15	8	5	220	—	—
Denby & Cumberworth ...	320	48	58	441	10	—	2	2	8	—	—
Denholme ...	48	47	56	1111	76	23	3	2	44	1312	1129
Dodworth ...	93	69	99	1386	82	—	8	93	74	—	—
Doncaster Boro* ...	1155	96	97	850	10	2	—	4	65	—	—
Drighlington ...	90	95	83	3396	198	327	3	5	—	628	656
Earby ...	96	120	162	2082	8	1	4	8	90	860	998
Elland ...	151	43	39	345	15	—	4	11	—	—	—
Emley ...	33	33	22	509	82	—	—	2	—	—	—
Farnley Tyas ...	14	13	15	31	4	1	—	3	—	—	—
Farsley ...	80	65	69	1393	26	—	2	6	—	1055	1118
Featherstone* ...	373	—	28	774	77	—	1	37	—	—	—
Flockton ...	28	33	73	482	115	13	3	2	—	1891	1942
Garforth ...	75	80	89	2082	8	—	2	11	—	—	—
Gildersome ...	43	39	39	2063	58	80	6	46	—	—	—
Golear ...	156	129	147	—	—	—	—	4	—	—	—
Goole* ...	512	50	54	994	6	23	—	4	—	—	—
Greasbrough ...	69	45	89	890	52	110	1	3	44	—	—
Greeland ...	48	89	97	529	15	—	—	9	—	—	—
Guiseley ...	96	89	97	529	15	—	—	1	—	—	—
Gunthwaite ...	9	6	3	145	24	—	—	1	—	—	—
Harrogate Boro* ...	480	—	—	—	—	—	—	30	—	—	—
Haworth ...	79	77	84	1736	30	1	8	8	74	628	656
Hebden Bridge ...	78	81	64	1084	2	—	5	5	90	860	998
Heckmondwike* ...	144	—	—	—	—	—	—	11	—	—	—
Heusworth ...	403	380	256	347	13	48	20	34	—	—	—
Hipperholme ...	62	63	53	522	8	—	—	4	—	—	—
Holme ...	9	1	9	121	7	—	—	1	—	—	—
Holmfirth ...	160	154	244	2472	96	—	5	6	—	—	—
Honley ...	49	49	47	1067	38	1	—	2	—	—	—
Horbury ...	154	127	146	1928	26	5	9	2	9	1213	1408
Horsforth ...	140	118	118	1258	88	—	—	7	28	1919	1686
Hoyland Nether ...	382	387	405	3849	124	1	23	29	117	1978	1978
Hoylandswaine ...	14	13	14	283	25	—	1	—	—	—	—
Hunsworth ...	24	13	22	514	10	—	—	2	2	—	—
Ilkley* ...	103	—	—	—	—	—	—	7	—	—	—
Keighley Boro* ...	678	—	45	474	—	—	—	79	—	1223	1223
Kirkburton ...	52	53	49	261	13	—	3	3	159	1626	1757
Kirkheaton ...	55	106	59	744	46	4	3	11	7	1333	1369
Knarborough ...	100	202	178	1137	27	98	10	18	204	—	—
Knottingley ...	194	36	54	277	9	18	2	1	—	—	—
Lepton ...	47	145	125	590	2	—	10	12	—	—	—
Linthwaite ...	153	28	36	790	10	—	—	4	—	—	—
Luddendenfoot ...	54	64	110	1947	98	—	1	2	—	—	—
Marsden ...	105	84	91	1351	48	10	5	5	—	800	623
Meltham ...	89	87	75	1131	17	—	3	9	—	—	—
Mexborough* ...	398	—	29	149	1	—	—	47	—	—	—
Midgley ...	19	13	224	1023	59	99	10	1	24	1684	1452
Morley Boro* ...	451	226	—	—	—	—	—	19	—	—	—
Mytholmroyd ...	49	19	34	1148	22	—	1	34	—	—	—
New Mill ...	74	55	95	1318	18	—	3	6	—	—	—
Normanton ...	423	391	445	3510	6	47	14	41	47	1395	1258
Oakworth ...	62	59	47	779	52	—	1	5	17	—	—
Ossett Boro* ...	275	—	—	—	—	—	—	26	—	—	—
Otley ...	166	163	175	1228	136	343	3	14	38	—	—
Oxenhope ...	35	34	32	1157	68	6	3	8	—	2257	2167
Penistone ...	71	70	77	1262	178	3	26	51	—	955	904
Pontefract Boro' ...	474	490	419	2318	102	3	—	17	—	466	401
Pudsey Boro* ...	214	—	77	1102	95	37	4	3	23	—	—
Queensbury ...	89	89	48	265	8	—	3	1	—	577	617
Rawdon ...	54	43	388	8907	186	446	9	4	9	835	872
Rawmarsh ...	415	363	388	8907	12	155	1	3	45	959	642
Ripon City ...	144	124	88	4573	4	28	—	4	—	—	—
Rishworth ...	7	5	11	283	—	—	—	5	3	—	—
Rothwell* ...	292	—	—	—	—	—	—	24	—	—	—
Royston ...	192	196	198	2262	66	86	6	16	—	1645	1886
Saddleworth ...	179	161	167	1777	23	79	12	9	—	—	—
Scammonden ...	7	3	4	72	3	8	—	—	—	1277	1381
Selly ...	210	149	134	1636	38	41	6	10	163	—	—
Shelf ...	27	21	22	280	1	1	1	1	—	—	—
Shelley ...	27	28	27	455	17	3	4	2	—	—	—
Shepley ...	18	24	20	329	12	—	6	1	—	—	—
Shipley* ...	529	—	70	1336	20	—	3	46	9	—	—
Silsden ...	69	67	63	1489	12	31	5	3	9	617	617
Stelmanthorpe ...	58	62	158	1709	91	31	3	4	—	—	—
Skipton ...	195	167	108	430	3	10	7	13	45	835	872
Slaithwaite ...	90	88	88	1381	69	—	3	5	2	959	642
South Crosland ...	38	28	59	479	5	3	1	4	—	—	—
Southowran ...	45	42	49	479	5	—	1	5	3	—	—
Sowerby ...	65	25	49	1591	28	—	—	4	—	—	—
Sowerby Bridge ...	182	105	91	1756	208	123	1	16	—	—	—
Soyland ...	29	29	40	722	48	40	—	—	—	—	—
Spennborough* ...	502	—	—	—	—	—	—	48	—	—	—
Springhead ...	87	91	84	1121	12	—	6	—	—	—	—
Stainland ...	80	76	55	757	32	110	2	10	69	—	—
Stanley ...	327	307	327	3202	263	13	17	38	73	1593	1720
Stoeksbridge ...	208	212	239	1908	35	—	9	15	2	911	787
Swinton ...	353	355	380	3382	36	36	11	34	—	1485	1460
Thurstone ...	44	39	32	570	27	—	6	6	—	1690	1608
Thurnscoe ...	212	215	206	1283	9	25	—	11	—	—	—
Thurstonland ...	12	9	5	67	—	—	2	4	2	—	—
Tiehill ...	60	58	49	1530	157	68	—	18	—	—	—
Todmorden Boro* ...	351	—	377	2140	57	—	12	35	—	2838	2837
Wath-upon-Deane ...	14	7	14	108	3	3	—	1	208	—	—
Whitley Upper ...	161	167	171	2004	—	—	8	15	—	—	—
Whitwood ...	490	—	—	—	—	—	10	56	4	—	—
Wombwell* ...	291	306	223	2426	11	11	—	31	—	769	561
Worsborough ...	136	123	120	1807	102	—	6	5	—	—	—
Yeadon ...	—	—	—	—	—	—	—	—	—	—	—
Total of Urban Districts	22113	12016	12148	135837	5044	3029	448	1824	2119	51295	51136

II. RURAL.

Barnsley	95	90	84	693	50	3	3	9	—	—	—
Bishopthorpe	42	21	22	187	20	—	—	3	—	—	—
Bowland	83	58	40	45	29	—	2	3	35	—	—
Doncaster	915	861	786	5991	300	183	24	67	70	2107	2187
Goole	207	188	202	3794	123	25	7	18	308	—	—
Great Ouseburn	194	359	211	2467	381	25	—	17	57	304	423
Halifax	105	76	98	989	37	36	3	4	23	—	—
Hemsworth*	1200	—	—	—	—	—	—	66	—	—	—
Ilkley	176	191	135	1052	69	3	4	14	43	1676	1650
Keighley	91	56	56	913	11	4	2	7	5	—	—
Kiveton Park	365	353	328	3215	136	74	11	26	—	2113	1782
Knarborough	129	114	109	2686	123	2	1	7	25	—	—
Pateley Bridge	128	44	71	777	14	2	1	14	13	—	—
Penistone	115	80	98	1212	72	2	2	8	3	—	—
Pontefract	604	586	568	6537	532	52	26	45	45	1467	1774
Ripon	98	82	82	2151	188	93	4	8	50	—	—
Rotherham	1092	1039	1000	11356	414	110	31	98	33	1036	1007
Sedburgh	65	57	40	120	—	—	1	3	—	—	—
Selly	138	84	106	2321	80	31	2	7	2	—	—
Settle	267	147	215	2421	144	39	7	24	32	608	654
Skipton	327	238	329	5281	188	11	8	28	56	519	466
Tadcaster	652	463	511	5209	550	101	17	49	314	1720	1768
Thorne	418	426	372	1375	50	13	23	29	3	848	976
Todmorden	59	43	56	935	1	—	8	8	—	—	—
Wakefield	436	418	395	3691	202	51	16	40	484	801	779
Wetherley	250	198	190	3777	331	25	5	10	408	486	536
Wharfedale	130	120	94	1258	142	22	4	6	2	—	—
Wortley	493	424	516	5785	141	119	17	37	6	2065	1741
Total of Rural Districts	8874	6816	6714	76478	4328	1026	229	695	2017	15750	15743
Grand Total for the Administrative County	30987	18832	18862	212315	9372	4055	677	2519	4136	67045	66879

